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Digital Projects for the Public: Prototyping Grants

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Field of expertise: History of Science

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APPLICATION INFORMATION
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Description of project: WALKING CINEMA: MUSEUM OF THE HIDDEN CITY (MoHC) is a mobile application and walking tour exploring San Francisco’s history of affordable housing. Due to its unique mix of preservationist and progressive policies, San Francisco’s affordable housing stock spans a range of eras: from Depression Era minimalist housing blocks, to inclusionary housing in expensive new glass towers, to the largest concentration of Single Room Occupancy hotels left in the United States. The project will use this architecture and its surrounding neighborhoods as stages to show how the history of affordable housing informs present and future efforts to create shelter for all the city’s residents. Amidst numerous cranes, ubiquitous upscaling, and notorious evictions, MoHC will reveal a saga of unintended consequences for a project that may just be getting its footing in one of the most expensive cities in the country.

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NATURE OF THE REQUEST

WALKING CINEMA: MUSEUM OF THE HIDDEN CITY (MoHC) is a mobile application and walking tour exploring San Francisco’s history of affordable housing. Due to its unique mix of preservationist and progressive policies, San Francisco’s affordable housing stock spans a range of eras: from Depression Era minimalist housing blocks, to sparkling new inclusionary units in glass towers, to the largest concentration of Single Room Occupancy (SRO) hotels left in the United States. The project will use this architecture and its surrounding neighborhoods as stages to show how the history of affordable housing informs present and future efforts to create shelter for all the city’s residents. Amidst numerous cranes, ubiquitous upscaling, and notorious evictions, MoHC will reveal a saga of unintended consequences and the steady evolution of our national housing program, which may just be getting its footing in one of the most expensive cities in the country.

Rather than a typical architectural tour, MoHC will interweave expert interpretation with the lived experiences of four diverse citizens who all live in or work with affordable housing. The characters include a young developer, Yusef Freeman, who grew up in a neighborhood in decline and is now leading the revitalization of the Candlestick Park district; Yesenia Ramirez, a mother of three who won an affordable unit in a slick highrise next to Twitter’s headquarters after being marginally housed for four years; Gary Kamiya, a local historian journalist and bestselling author, who has written extensively on equitable housing in San Francisco; and an historic figure, Justin Herman, who led urban renewal programs in the city in the mid-20th century. In a sense, MoHC will work like a walkable Roshomon, using multiple viewpoints and the built environment to explore the evolution of affordable housing. But the real star of the project will be the history embedded in the streets and structures of San Francisco. By getting audiences to scrutinize doorways, fences, signage, and walkways, they will feel like first-hand witnesses to the history of affordable housing and be inspired to participate in its evolving story.

The Center for Independent Documentary (CiD) is asking the NEH for $100,000 to develop a fully functional prototype app featuring the Ramirez walk as test content. Funds will be used to develop the story, audio production, augmented reality overlays, and several installations along the route. In addition to the geolocated walkable version of the content, we will also develop a responsive web version for remote audiences to experience the content from home. On the technical side, the team will be using the funds to update their existing (and NEH-funded) platform to improve the user interface and augmented reality functionality.

HUMANITIES CONTENT

The landmark Housing Act of 1937 expanded Franklin Delano Roosevelt’s previous legislation to help home buyers, extending the National Housing Act of 1934 to include those who could not afford to purchase a house. The Act states: “It is the policy of the United States to promote the general welfare of the Nation...by remedy[ing] the unsafe housing conditions and the acute shortage of decent and safe dwellings for low-income families.” Drafted in the midst of the Great Depression, this Act created what is now known as “public housing” in the United States, overseen by a new entity, the United States Housing Authority, with an initial bankroll of $500M to be given out as loans to local housing authorities (such as San Francisco’s SFHA.) Cries of

* Affordable housing is generally defined as housing that costs no more than 30% of the occupants’ monthly income. In this proposal, the term also refers to housing that is far below market rate (like SRO rooms) or subsidized.
* So just how much housing are we talking about when we speak of San Francisco’s “affordable” housing? About 10% of
protest came from the real estate sector for fear that public housing would bite into the emaciated rental and sales markets. But FDR staunchly defended the legislation, telling the nation, “I see one-third of a nation ill-housed, ill-clad, ill-nourished. . . . The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little.”

The Act recognized the indivisibility of inadequate housing and persistent poverty, posing an enormous challenge to the nation: to not only finance millions of low cost homes, but to also create a federal and local network that could effectively shuttle citizens out of poverty. Eight decades after this legislation, the government and the private sector have cycled through a wide range of affordable housing schemes, yet the challenge to provide decent shelter for all remains acute.

Walking Cinema: Museum of the Hidden City focuses on San Francisco, one city whose housing woes have attracted national attention. But with its mix of preserved affordable units, cutting edge experiments with new construction, and highly walkable streets, San Francisco is the perfect place to examine how affordable housing has evolved and see where it might be going. MoHC is an immersive media project that will dig into the history of this issue, emphasizing the controversial role of the private sector, the evolution of neighborhood design, and the influence of mapping practices in shaping our national stock of affordable housing. What emerges is a sense how affordable housing has, in some senses, come full circle from its initial emphasis on residents' upward mobility, but now with a much stronger relationship to the private sector and the city at large.

PRIVATE SECTOR

Regulated public environments are...quasi-private spaces, where private partners distribute and maintain resources supplied by the public sector. They shape the material conditions and opportunities available for recipients, but in exchange set specific behavioral expectations that reflect a larger set of public norms. — Jane Rongerude

This project takes a uniquely visual approach to understanding affordable housing. Features that a pedestrian might spot—a doorway, signage, gates, warnings, murals, and pathways—become exhibit space for the arguably shrouded efforts to keep San Francisco economically diverse. For instance, in the traditionally African American Fillmore district, close inspection of the fencing around a public housing project reveals a dramatic shift in the resident population during the 1960’s. Or in Mid-Market, we examine the amenities in a privately-owned public park to understand the tension between market rate and affordable residents of the neighborhood. Or in the Tenderloin neighborhood we notice that building heights reveal the boundaries of a landmark ordinance to protect SRO’s. And while the words “affordable housing”*, may bring to mind large, decrepit, fenced-off urban towers, the Museum of the Hidden City will help audiences see that a large portion of the affordable housing stock in San Francisco is privately run and/or financed. From one perspective, these partnerships with the private sector help integrate affordable housing into the surrounding neighborhood, while some academics critique

* So just how much housing are we talking about when we speak of San Francisco’s “affordable” housing? About 10% of the 380,000 units of housing in San Francisco are zoned as permanently affordable. Recently, despite a dramatic increase in housing costs, affordable housing has constituted a increasing proportion of units built, averaging 30% from 2010-2014. These affordable stats do not include the 170,000 units that are rent controlled (which may or may not be affordable housing, depending on when the rent control started.)
It as the “spatial management of poverty.” (Rongerude, 5.) MoHC asks the question: What is the proper role for private entities in building and managing affordable housing? To answer this question we will look at the tradeoffs private sector involvement has brought to three types of affordable housing: “mixed income”, inclusionary, and SRO hotels.

**Mixed Income Housing**

Some affordable housing is, by design, interwoven with market rate housing in what are known as “mixed income” developments. They are mostly financed by federal programs, but also depend on partnerships with private businesses to turn these subsidized residences into sustainable communities. Yusef Freeman’s walk through the Candlestick neighborhood (see Design Document below) focuses on this type of affordable housing. What’s most visually striking about these developments is how unaffordable they seem to the casual observer, with tasteful use of glass, a low-rise profile, and generous use of open space. But look a bit deeper and one sees how the imprint of the 1937 Housing Act is inscribed in these buildings through strategically placed business incubators, high end retail, child care, and health and social services. It’s a space that’s optimized to bring lower income individuals into middle class lives.

While this may seem to the casual observer a reasonable approach to housing equity, to date there are no longitudinal studies showing that such arrangements lead to increased income for the affordable housing residents. And, as historian Amy L. Howard points out, mixed use has a paternalistic air that casts it as a “laboratory for modeling middle-class ‘standards’ and ‘good citizenship’ to low-income residents.” (Howard, 5.) Though Freeman wouldn’t call the development a laboratory, he does recognize that there is a clear intent to create jobs and to provide middle class stability for lower income residents. MoHC will examine closely the social engineering of mixed income developments, bringing a range of critiques from class bias (Howard, 2014), to loss of affordable units (Rongerude, 2007), to space stereotyping (Bonam, 2010). These frameworks, mixed with the lived experience of a community-oriented developer, will help audiences see that mixed income may not be a perfect solution, but has solved some of the issues inherent in traditional public housing.

**Inclusionary Housing**

The second way that the private sector has significantly impacted affordable housing is via inclusionary housing. First put into San Francisco law via a 2002 ordinance, inclusionary (or Below Market Rate/BMR) housing means residential construction over 25 units is required to make 25-33% of the units affordable (and usually in the same building as the market rate units.) This form of affordable housing is currently the fastest growing form in the city and, arguably in the country (over 400 American cities have inclusionary housing policies.) Yesenia Ramirez’s walk takes us into the lived experience of this policy.

As with most inclusionary buildings, Yesenia’s highrise is designed for high-income urbanites. The building boasts ultra-modern security, doggie spas and Tesla test drives. Redwood paneling, forest wallpaper, and abundant use of “natural materials” evoke nature. In the midst of this swank, 70 households making less than 55% of AMI (Adjusted Median Income) live. Of course, this techno-natural vision of life is not meant to uplift low income households, rather it is marketing for the young urban professionals who rent at full market rate.

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*This is by far the highest inclusionary requirement of any city in the country. Of the 400+ cities in the United States that have inclusionary housing policies, most require a rate between 5-15%. Such high requirements may backfire and discourage builders, thus slowing down the overall rate of inclusionary construction.*
While inclusionary housing is a very efficient means of creating low income housing (cities become arbitrators rather than builders), it begs the question of whether it is the optimal form of housing for low income individuals. Some scholars see it as a pernicious trend towards placing the fate of needy individuals into the hands of profit-seeking entities: “As public housing management is passed from housing authorities to private companies, public housing residents move from public neighbor to private dependent. [This is] much more about the facilitation of local housing markets, the reform of public sector institutions, and the spatial management of poverty than it is about physical improvement of public housing communities or the social improvement of public housing residents.” (Rongerude, 2 and 21) Jane Rongerude’s framework helps us consider that the real vision behind inclusionary housing may be the facilitation of gentrification rather than a counterbalance to it.

Walking with Yesenia around her building and neighborhood, we see that she is, in a sense, isolated from the surrounding community. The expensive eating options, private security in public spaces, and the overall trend in San Francisco away from family life (San Francisco has lowest number of children per capita in the nation) all combine to make Yesenia feel invisible to the predominant forces around her (see sample video in Design Document.) Walking with Yesenia, audiences begin to see beyond the need for “nice” affordable housing, realizing that cohesive communities are difficult in these circumstances.

**SRO Hotels**

Many American cities throughout the 20th century had a stock of cheap, long-term hotel rooms known as single room occupancy (SRO) hotels. The hotels were privately run and offered monthly rates to blue collar, elderly, and migratory workers. Paul Groth’s book Living Downtown: The History of Residential Hotels in the United States chronicles this portion of low income housing and notes that in the 20th century San Francisco “was simply the most highly developed example of hotel housing” (19) in the country. Though this stock of affordable housing disappeared in most American cities through suburbanization and downtown decline, in 1980 San Francisco passed an ordinance to protect SRO’s. These buildings still form a key piece of San Francisco’s spectrum of affordable housing and are the subject of Gary Kamiya’s walk through the Tenderloin.

SRO’s as structures remain protected, but their status as “affordable” may be in question as some private owners are rehabbing and raising prices on their rooms. Approximately one third of the SRO housing stock in San Francisco is city-owned and price locked as permanently affordable; but the other two-thirds are privately owned and subject to price increases and upscaling. Seeing these structures in person, though, audiences become aware that this threat of conversion to market rate is a difficult process due to the natural barriers built into SRO’s: shared bathrooms are hard to convert to private baths and plaques marking the hotels as “historic” belie the regulatory challenges in reconfiguring the miniscule rooms. Walking with Kamiya, audiences will gain an appreciation for how the mostly private enterprise of SRO hotels have provided a meaningful safety net for San Franciscans and will continue to do so for the foreseeable future.

The theme of the private sector’s involvement in public housing will deftly mix the personal experiences of a developer, historian, and affordable housing resident with critiques from historians, sociologists, and architects. Overall, this humanities theme will challenge audiences to consider what is the right balance between regulation and free market forces in building and managing affordable housing.
THE EVOLUTION OF NEIGHBORHOOD DESIGN

When the United States Housing Authority first formed in the 1938, a film reel conveyed the grand vision of the fledgling agency. Dubbed “Housing in Our Time,” the film describes an almost military national movement to destroy slums and create suburban-like cottages for folks who used to live in shacks. As Lawrence Vale notes, “The near-religious zeal of early public housing proponents at war on the slums of the city brought an urgency to the task, turning it from a construction venture into a moral crusade.” (Purging the Poorest, 332)

This moral crusade created housing that, as noted above, looked like barracks, separate from the surrounding urban environment, planned as a fully functional microcosm within the city. However, as Amy Howard notes, in some early public housing communities the intent was not to divide, but to blend this microcosm into the surrounding neighborhood: “Housing Commissioner Marshall Dill described Holly Courts [the first project of the SFHA] as ‘integrated into the neighborhood’ with residents who ‘will trade in local stores, attend local churches, [and] send children to local schools.” (Howard, 7) Similar to the narrative of mixed income housing, San Francisco's first public housing projects intended to uplift the nation's poor by putting them in close contact with exemplary middle class communities. But as many historians have noted, this didn't work out. Over the subsequent decades, these types of early affordable projects tended to become more and more isolated, in part due to their layout.

In his book Reclaiming Public Housing, Vale says, “To some extent, these earliest public housing communities might better be described as enclaves rather than as neighborhoods, since their driving impulse was too pointedly antineighborhood...Even today, nearly every urban public housing project built between 1935 and 1970---whether high-rise or low-rise---remains instantly recognizable as a distinct type. The combination of flat roofs and streetless superblocks distanced public housing from the more desirable models of American domestic life.” (Vale, 2012, p 9) MoHC will examine these design flaws closely, especially in the ways the Justin-Herman-era projects connect to the surrounding Fillmore neighborhood. While the design wasn't the only thing that made this form of affordable housing fail (looser admission requirements, rising crime, bureaucratic centrality, and corruption also played a part,) it's a striking visual component that will help audiences ease their way into this multi-decade story of decline.

Specifically, examination of public housing in the Fillmore reveals a plethora of fencing and security cameras that were added well after the units' construction. The fencing was put up as crime increased in the neighborhood. In his 1972 book Defensible Space (which was commissioned by the Department of Housing and Urban Development), Oscar Neuman attempted to defend the fencing by describing it as “territorial definition...[which] may appear to be the antithesis of the open society, and surveillance a further restriction to its freedom...We, however, are advocating territorial definition and the creation of surveillance opportunities to allow the citizen of the open society to achieve control of his environment for the activities he wishes to pursue within it.” Yet as Vale notes, “Although the rhetoric is about 'securing the perimeter' against the depredations of outsiders, the reality for residents is more ambiguous; fencing out is also fencing in.” (p. 15) MoHC will use the current built environment and archival images to tell this story of how an open housing scheme became a cage, paying close attention to the racial issues at play as a predominantly white Redevelopment Agency reconfigured the historically African American Fillmore.

And, as we see in other MoHC walks, over the past 30 years, affordable housing has been grappling to overcome this isolation, and in some senses trying to return to the European
socialist designs that inspired public housing in the 1940s. An example can be found in the ethos and design of the Candlestick neighborhood development. This predominantly African American neighborhood (which was the refuge for many families evicted from the Fillmore by redevelopment,) will soon host midrise mixed income housing that will be meshed with the existing grid plan in an effort to bring neighbors together. The urban theorist Jane Jacobs pushed for such design in her book The Death and Life of Great American Cities, claiming it actually was more secure than high fences: “The buildings on a street equipped to handle strangers and to insure the safety of both residents and strangers, must be oriented to the street. They cannot turn their backs or blank sides on it and leave it blind.” (p 83)

But as mixed income tends to mesh its residential buildings into the surrounding neighborhood, the embrace is not always mutual. As noted above, rapid gentrification in the Mid-Market neighborhood makes it difficult for Yesenia to really feel part of the gourmet coffee streetscape. As project advisor Ocean Howell notes even the parklet fad of turning public parking spaces into mini parks is not necessarily good for low income residents: “Putting a private concession (cafe seating) out in a public space has the effect of privatizing that space, claiming it for certain kinds of uses, by certain kinds of people.” As affordable housing expert Rick Jacobus argues, neighborhoods that house both high- and low-income residents tend to get stretched in two directions, becoming “bipolar.” And in the long run, he claims, the high end usually has its needs met first. We believe audiences will be fascinated by this larger framing of the problem of gentrification, especially as it relates to this longer process of affordable housing endeavoring to overcome its isolation.

EMERGING MAPPING PRACTICES

Mapping has had an important role in the history of affordable housing from redlining practices to urban renewal’s declaration of blighted areas. In recent years, mapping has also emerged as an important tool for scholarship in representing large datasets and trends in affordable housing.

The HOLC (Home Owners’ Loan Corporation) created by the National Housing Act of 1934 commissioned maps of home loan default risk to be drawn in 239 cities across the country. The riskiest areas were type “D” zones and were outlined in red ink. It is believed that these maps were used for decades by lending institutions to discriminate against the often African American residents of redlined zones, banning them from home loan eligibility. San Francisco, however, appears to have been an exception to this rule. As Ocean Howell notes in his book Making the Mission, it was actually the areas that were not outlined at all, the “no-lined” commercial/industrial zones, where residents could not get loans. Howell says, “HOLC redlining has sometimes been portrayed as the death knell of residential lending in a neighborhood, but in SF, at least, that distinction belongs to the practice of no-lining” (166-7)

It wasn’t until the 1968 Housing Act that this practice was identified and outlawed, but the redlining, and “no-lining” had left generations of low-income Americans, especially African Americans, without access to home loans that might have given them a leg up. MoHC will present the impact of these practices in interactive and location-specific ways, showing historic images in situ of the slums that developed in San Francisco due, in part, to lack of access to housing loans.

The existence of such dilapidated, divested neighborhoods is established in the introduction to Justin Herman’s walk, setting up the topic of urban renewal. In order to clean up what some planners saw as slums, planning departments could (and still can, though the practice is now
discouraged) declare specific sections of cities “blighted” and use imminent domain to force residents to move out while the area is redeveloped. This type of forced eviction happened in cities all over the country including San Francisco, where the Fillmore A-2 project displaced 13,500 people, almost none of whom returned because of the extended timeline in building replacement units. MoHC will work with the Stanford Spatial History Lab to create interactive maps for the app that allow audiences to zoom into specific blocks they are traversing and see animated stats on displaced individuals, seeing their ethnicities and trajectory once they were removed from the Fillmore.

In addition, audiences will use augmented reality to overlay historic images on the audience’s surroundings to see how Herman’s team dubiously identified blight in neighborhoods that were ethnic, but not necessarily run down. The app will also draw attention to the borderlines of redevelopment and alert walkers to when they are crossing out of a redevelopment zone. Ironically, exiting the redeveloped areas will seem like an improvement, as those areas are now populated with lovely, rehabbed Victorians that were considered white elephants in Herman’s time. Overall, maps in the Fillmore walk reveal a lack of foresight in construction timelines, value of Victorian housing stock, and biases about blight that permeated urban renewal projects in San Francisco.

Such borderline mapping will also be used in the Tenderloin walk, where the landscape reveals lines of preservation rather than destruction. Specifically, audiences will be alerted to the dramatic shift in hotel heights along the borders of the Tenderloin neighborhood. Documented in Chester Hartman’s City for Sale, in this neighborhood, urban renewal found powerful grassroots opposition that set in motion the 1981 Residential Hotel Demolition and Conversion Ordinance. This ordinance was unique for its time and in effect stopped the expansion of high-rise tourist hotels in the neighboring Union Square, and thus the borders of the protected area show a dramatic line of building elevation drop. As Hartman notes, the horrible experience of the residents in the Fillmore in the 70’s “had been well analyzed, after the fact, by scholars and government agencies, and the accompanying condemnation of the Redevelopment Agency served to alert other to the dangers of [displacement.]” In a sense, the shock waves of the disastrous handling of thousands of Fillmore residents became the foundation of protected zones and compensatory housing that can still be discovered at street level via plaques, rooflines, and local demographics.

Overall, mapping and MoHC’s other humanities themes will alert audiences to a series of unintended consequences as San Francisco (and many other cities) implemented fair housing programs. But it will also show that communities and regulation in turn arose in reaction to these consequences, changing the way affordable housing is built and protected. And MoHC will make it clear that this arc of reform is far from settled. MoHC thus becomes an invitation to get involved with the meetings, proposed legislation, and everyday interactions that will form the next phase of this enduring quest create an effective national housing program.

**Similar Projects**

This project has few true analogues in the fields of mobile storytelling, museum exhibits, and urban planning. While digital walking tours such as Detour’s “Making Market Street” and Soundwalk’s “Ground Zero” deal with urban planning history, none of them focus on the history of affordable housing. There have been some excellent museum exhibits on the history of gentrification (for example, the Museum of the City of New York’s 2016 exhibit and lecture series
“Affordable New York”), but none have used the city itself as the exhibit space. As advisor Jane Rongerude notes, “Walking Cinema: Museum of the Hidden City has an important contribution to make to the fields of affordable housing, community development, and urban planning because it emphasizes the importance of first-hand knowledge and the value of place in bringing the topic of poverty housing to the foreground.” The project team's past successes, technical skill, breadth of advisory knowledge, and highly notable geographical context will make MoHC a standout experience for a broad audience.

PROJECT FORMAT

The driving idea behind CiD's humanities-based mobile storytelling is that history is embedded in the world around us, and that a well-told, sequential revealing of this history in situ makes the past come alive. As a previous Walking Cinema user reported, history becomes much “more relevant when I can put it to a place.” (Interviews, various, by Walking Cinema, Boston, Oct-Nov, 2009) Similarly, to meet MoHC's goals to tell the story of affordable housing through observable components of the streetscape, this mapped, immersive format is ideal.

MoHC's prototype will be comprised of two formats: a downloadable app for Android and Iphone and a mobile-optimized website for in-home viewing.

Mobile App

For 12 years the project team has been honing its mobile platform for location-based storytelling. The MoHC app will be comprised of 5 tours, one for each character and a fifth tour that combines their perspectives in one site. For the prototyping grant, the team will be producing Yesenia Ramirez’s tour of the Mid-Market neighborhood. Specifically, this tour will be comprised of approximately 10 short (1-3 minute) audio chapters that play out over a specific geography and are perfectly synched to your walking speed. We think this length will work well for both professional audiences on a lunch break and students doing the walk for a class. Mixed into these chapters are augmented reality stops and installations. Augmented Reality is a technology that overlays images, video, and animations over a Smartphone’s camera. These media overlays respond to the direction the user is facing and the angle of the camera. So, for example, the interior of a building could be seen scanning an AR overlay over the entire façade.

Installations, on the other hand, will be tactile artifacts discovered along the walking route. They will be designed to bring to life the history and character being explored. These artifacts also confer on the walk a feeling of being in a private museum without walls. We have found from previous work that audiences relish being able to discover real artifacts that relate to the story being told: from an historic game board to a docked dory, installations give audiences a chance to feel like they have found clues in a historical scavenger hunt. Thus the app portion will be an incredibly immersive combination of audio, installations, GPS maps, and augmented reality.

Responsive Designed Website

In our previous work, the project team has discovered that audiences from around the world were downloading Walking Cinema apps and talking how much they loved the content, even though they couldn’t go to the site. This remote experience of Walking Cinema will be supported via a mobile-optimized website that tells a character’s story via text, images, animations, and 360 video of the streetscape. Using the popular parallax scrolling technique (see, for instance, the Guardian’s “Firestorm” story,) the web version will dig more into each character's backstory and
give audiences both a sense of their neighborhood and their particular relationship to affordable housing.

As a transmedia production, there will be some degree of overlap between the walked and the seated experience of the content, but the idea is that one actually drives curiosity in the other. We envision the walkable experience to be more lively than the website, in the sense that audiences are hunting for clues in the built environment and absorbing their surroundings from a character’s particular perspective. The web version, on the other hand, will feature the same character revealing the motivations and life circumstances that led them to affordable housing. The streetscape, presented as interactive 360 video becomes a supporting visual to their personal story, and not the central focus of the narrative.

Models for This Approach

As mentioned above, the project team has developed prior walking cinema projects including the NEH-funded WALKING CINEMA: Murder on Beacon Hill and WALKING CINEMA: Posts from Gloucester. The in-street portions of these projects have been running continuously for 7 and 4 years respectively, garnering industry awards, international press and scholarly praise for their sound historical scholarship, innovative use of mobile phones, and captivating narrative. Murder on Beacon Hill became the first app to win a prize at a film festival. One journalist even wondered if Walking Cinema might be the first step in creating an Oscar for the “Best Original App.” The Murder on Beacon Hill app was voted by the Boston Globe as the Best Tour App for the city. And Posts from Gloucester received the Gold Muse award for mobile storytelling from the American Alliance of Museums in 2013. Thus, the project team has a proven track record of creating highly-entertaining and historically-grounded handheld multimedia.

The format is also rapidly expanding to broader public radio and travel audiences via the Detour platform. Detour, a production partner in this grant, is a San Francisco-based company that produces technology and content for location-based walking tours. Detour has launched tours in 10 cities internationally and they are rapidly expanding their coverage via a drag-and-drop location-based media production platform. Detour has worked with the project director, Michael Epstein, on a location-based media course at the California College of Art and will be assisting with the editorial and technology portion of the project.

As you can imagine, location-based media is also big and continuing to grow in the museum industry. Inspiration in the museum space for this project comes from artists such as Janet Cardiff who specializes in binaural audio and subtly crafted video overlays to quotidian environments. Also of note in this space is the work of the audio collective Circumstance. They produce highly-composed, musically grounded walkable narratives for museums and festivals and have also collaborated with project director Michael Epstein on presenting work to CCA students.

AUDIENCE AND DISTRIBUTION

Audience Studies for previous WALKING CINEMA projects revealed a broad age range interested in this type of storytelling. Overall, we found that in our sample group of 20 testers, 50% were 18-30, 20% were 30-40, and 30% were over 50. Users consistently gave the tour high marks, averaging 4.9 stars out of 5 in rating the overall experience. So while we had designed the tour to appeal to younger audiences, in the words of one advisor, we should be thinking beyond Millennials:
I know you said in WALKING CINEMA’S planning that you were aiming at the 18-30 demographic, but I think you're selling yourself short there. In a way you're trying to combine a technology with which youth are comfortable with an experience – cultural tourism – that tends to be dominated by Boomers, my age group. However, most of us are not technophobes, your platform is very user-friendly, the directions are clear and not intimidating, and the program is easy to download.” (Ronald Story, Walking Cinema advisor, 2010)

This comment fits with the reaction of several younger testers who said they’d like to take the tour again…with their parents! Very few activities fit into such a category, but possibly the interactivity of the project, its artistic flair, and foundation in researched humanities makes for the type of medium that has something for a range of 18+ audiences.

As far as audience categories are concerned, we consider our primary audience to be 20-40 year olds working in the Mid-Market neighborhood. From initial screening of our content, we have found this group to be the most concerned about housing issues and enthusiastic about the format. As a secondary audience, we see students from middle school through college age doing these tours as a way to learn local history and understand one of the biggest issues San Francisco and many other urban centers are grappling with. Director Michael Epstein's position as a Senior Lecturer at the California College of Art should provide a significant conduit of college age beta testers. Finally, the project team thinks MoHC will appeal to the culture tourist segment of San Francisco's tourism industry. In our prototyping tests we will be sure to get feedback from this segment of San Francisco pedestrians.

Possibly one of the most encouraging results from prior our user tests was the fact that over half the testers rarely or never took audio tours in museums. For many the idea of any type of mobile interpretation was novel. Still they loved the WALKING CINEMA experience. In the words of one tester, “I never liked history class, but this was different. I was never bored and always amazed at seeing the things that happened right where I was standing.” We intend that MoHC will have a similar pull for audiences who don't traditionally do audio tours or actively pursue history.

As far as distribution goes, MoHC will take a partner-based approach to creating awareness and reaching a wide audience. Our relationship with Detour and their widely-distributed platform and local prominence will be the main way we plan to distribute the content. Similarly, we will work with the online atlas andhipster travel website Atlas Obscura to spread the word about the prototype and gather feedback. Our partners at the Stanford Spatial History Lab will also provide a broad base of local audiences for the project. Finally, Walking Cinema has seeded project interest already with three sold out previews of the project in local film festivals. We will use our own mailing list and festival networks to promote the launch and test phase of the MoHC prototype.

PROJECT EVALUATION AND TESTING

In developing the technical platform for the project we will use iterative testing by our internal QA team (ourselves) and a small group of outside beta users. Initially, our tests will be focusing on the app’s ability to run cross platform and perform well with high AR usage. As issues arise, we will be tracking them in a database, ranking their importance, and passing to our developer.
The content will be tested similar to *Walking Cinema: Murder on Beacon Hill*, for which we conducted observational interviews with beta testers. This testing must be done on site and we plan to initially test the content “live”, meaning we play cuts of audio for testers and specific places and get their feedback. Then as the app develops more we add augmented reality overlays and installations. Once the project is complete, we plan to test the content on 20 people representative of our target audiences. The first part of the test involves shadowing users as they walk with the tour, noting any usability issues, demeanor, and interactions with the sites and people along the walk. We will then interview participants after the tour using a standard script for each of them. Beyond asking if they liked the tour, we will probe what they found most memorable, what improvements they suggest, what characters were/weren't appealing to them, and how the tour content may affect their involvement in the issues affordable housing.

**RIGHTS, PERMISSIONS AND LICENSING**

All of our archival materials will come from the San Francisco Library Government Center and Map Room, where all materials come free of copyright.

For all recordings we will have all interviewees sign release forms and get permissions for any recordings we do on private property.

**HUMANITIES ADVISORS**

**Prof. Larry Vale**

Professor Vale will advise the project, focusing on its ties to national housing policy and history. He will be especially involved in the initial phases of scripting and the final stage of product evaluation. Vale is the Ford Professor of Urban Design and Planning in the Department of Urban Studies and Planning at the Massachusetts Institute of Technology. He is the author of several books on affordable housing including *Purging the Poorest* and *Reclaiming Public Housing*.

**Prof. Ocean Howell**

Professor Howell will bring his expertise in defensive architecture and San Francisco housing history. Initially, he will help the project team identify elements of the built environment that fit our humanities theme and complement our character's challenges. Ocean Howell is an associate professor of history at the Clark Honors College in the University of Oregon. Prof. Howell earned his PhD from the University of California, Berkeley. His research concerns the processes through which buildings and cities both reflect and shape social experience. He is particularly interested in American cities in the twentieth century, the urban history of the American West, urban governance and inequality, the history of youth culture, and the history of multiethnic neighborhoods. His book *Making the Mission: Planning and Ethnicity in San Francisco* was published by the University of Chicago Press.

**Prof. Zephyr Frank**

Professor Frank will advise the project team focusing on the mapping themes in the narrative and will direct the interactive map components of the app. Professor Frank is the Zephyr Frank is Professor of History and the Director of the Program on Urban Studies at Stanford University. He is also the founding Director of the Center for Spatial and Textual Analysis (CESTA). His research interests focus on Brazilian social and cultural history, the study of wealth and inequality, and the digital humanities.


**Prof. Michael Frisch**

Professor Frisch will be assisting the project team with research into the class issues inherent in the prototype narrative and neighborhood. He will also bring his expertise in oral histories to bear on the production teams recording and editing of the prototype narrative. Michael Frisch is Professor of History & American Studies/ Senior Research Scholar at the University at Buffalo, SUNY. He is an American social and urban historian involved for many years in oral and public history projects, often in collaboration with community history organizations, museums, and documentary filmmakers.

Prof. Frisch has been a partner in five current or recently completed IMLS National Leadership projects involving digital oral history content management, including OHDA. His applied practice has led to a series of major publications, most recently (co-authored with Douglas Lambert) “Beyond the Raw and Cooked in Oral History: Notes from the Kitchen,” in Donald Ritchie, ed., *The Oxford Handbook of Oral History* (NY: Oxford University Press, 2010)

**Prof. Jane Rongerude**

Professor Rongerude will be helping the project team in relating local history and theoretical frameworks for affordable housing critique. Jane Rongerude is Assistant Professor of Community and Regional Planning at Iowa State University. She received her BS in Environmental Studies from Portland State University and her PhD and MCP from University of California, Berkeley.

Her research interests focus on the redevelopment of public housing and urban systems of poverty management. She is especially interested in the institutional and spatial arrangements related to poverty management systems. Within these systems, she investigates how poverty is being dispersed, shifted and reformed within the urban landscape.

**Prof. Antwi A. Akom,**

Professor Akom will be helping the project team with themes of racial justice and helping with audience testing. Prof. Akom is an Associate Professor of Environmental Sociology, Public Health, and STEM Education at San Francisco State University and is a Co-Founder of the Institute for Sustainable Economic, Educational, and Environmental Design (I-SEEED), which focuses on building sustainable cities and schools. Dr. Akom has held academic appointments at UC Berkeley, the Lawrence Berkeley National Laboratory, University of California, San Francisco (UCSF), and the Health Policy Institute. His forthcoming books are *Building Sustainable Cities and Schools* (with Pedro Noguera) and *Ameritocracy: The Racing of Our Nations Children*.

**PRODUCTION TEAM**

**Susi Walsh, Executive Director**

Susi is the executive director of the Center for Independent Documentary and will be serving as an informal advisor to the project, especially in managing the grant and visibility of the project in the greater documentary filmmaker community.

**Michael Epstein, Technical Lead/Project Director**

Michael will manage technical development of project, coordinate staff, recording and editing audio, and will serve as the main point of contact on the project. Michael is an MIT Comparative Media studies graduate, specializing in mobile narrative development. He is the founder of [Walking Cinema](http://walkingcinema.com) and has directed numerous mobile narrative productions for museum,
university, and cultural organizations, including the NEH-funded WALKING CINEMA: Murder on Beacon Hill.

Laura Piraino Producer/Editor

Laura will be recording and editing audio and designing all visual components of the project. She is a graduate of the Massachusetts College of Art, specializing in animation and video production. Laura is also an award-winning filmmaker whose shorts have shown at festivals around the world.

Maxim Antinori, Developer

Max is an expert in mobile educational software applications and will be doing all of the web and app development for the project. Before working with Walking Cinema, Maxim Antinori worked at Tom Snyder Productions, Inc. in Boston, where he helped produce many award-winning software titles for K-12 schools. These titles include Rainforest Researchers, Math Mysteries, The Other Side, Minds-On Science, and others. Maxim has worked with Untravel since its founding in 2006 and was the key developer behind its beta publishing platform and its mobile tours software. His recent project, Species explorer, allows mobile audiences to photo capture wildlife and post to a location-aware database.

Jorge Just is a senior producer at Detour.com, a mobile technology and content company creating immersive audio tours in cities around the globe. Jorge has a Master’s degree from NYU’s Interactive Telecommunications Program and has worked and filed for This American Life. He will be helping with the writing, audio editing, and distribution process for the project.

STATE OF THE PROJECT

To date, the project team has developed a prototype of the project that includes: A) an in-depth video documentary about Yesenia Ramirez, the mother of three living next to Twitter. B) A prototype of the online experience using interactive 360 video. C) Educational outreach and audience testing via an on-site video installation and screening of the project in film festivals and public events. D) A mobile platform and a Content Management System (CMS) to deliver location-based audio, video, and Augmented Reality (partially from a previous NEH Digital Humanities grant.)

WORK PLAN

<table>
<thead>
<tr>
<th>MONTH</th>
<th>TASKS</th>
</tr>
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<tbody>
<tr>
<td>Jan. 2017</td>
<td>o Refine production schedule (Epstein)</td>
</tr>
<tr>
<td></td>
<td>o Refine research and development of Yesenia tour (Epstein + Piraino + Frisch + Just)</td>
</tr>
<tr>
<td></td>
<td>o Initiate spec. documents for website, Augmented Reality, and publication platform. (Epstein + Antinori)</td>
</tr>
<tr>
<td></td>
<td>o Contact advisers, and refine roles of each (Epstein + Advisors)</td>
</tr>
<tr>
<td></td>
<td>o Consult with support staff to establish tasks and scheduling (Epstein)</td>
</tr>
<tr>
<td>Feb-</td>
<td>o Piraino production trip to San Francisco: Join Epstein to meet with local advisers, consultants, and with Detour and Stanford Spatial History Lab (partner orgs.) Meet with</td>
</tr>
</tbody>
</table>
### March, 2017

- commercial and historic sites along tour route
  - Record interview with experts. (Epstein + Piraino + Frisch)
  - Shoot AR scenes on selected sites. (Epstein + Piraino)
  - Determine walking route; record scratch audio; collect images (Epstein + Piraino + Just + Akom + Howell + Rongerude)
  - First draft of spec. documents for website, AR, off-site parallax scrolling site, and publication platform (Epstein + Antinori)

### April-June 2017

- Produce Rough cut. (Epstein + Piraino)
  - Alpha version of mobile tour and website with scratch narration, temporary visuals. Test alpha versions on 10 users from target audience. (Akom team + Epstein)
  - Show mock-up to advisers for comments/feedback (Epstein + Advisors)
  - Refine Spec documents, script, and scheduling based on feedback. (Epstein + Antinori)
  - Record additional expert interviews (Epstein + Piraino)
  - Rough cut of website with parallax scrolling and wireframes of images.
  - Initial interactive map wireframe (Frank + Epstein + Piraino)

### July-December 2017

- Produce fine cut of audio. (Epstein + Just + Frisch + Piraino)
  - Complete version of app with rough visuals and full feature set. (Epstein + Antinori)
  - Test all stops on tour for accuracy of information and materials. (Akom + Epstein)
  - Test Beta versions on 5 users from target audience. Test AR feature (Akom + Epstein)
  - Send app to advisers for comments/feedback (Epstein + advisors)
  - Fine cut of website with 360 video, images, final text, and animated scrolling (Epstein + Piraino + Antinori)
  - Test remote experience with 5 users who don’t live in San Francisco (Epstein + Piraino)
  - Fine cut, interactive map (Frank + Epstein + Piraino)

### January-March 2018

- Record pick-up lines and edit final cut of audio (Epstein + Piraino + Just)
  - Final interactive map integrated into app (Frank + Epstein + Piraino + Antinori)
  - QA website and mobile app. Submit mobile application to relevant app stores. (Antinori)
  - Test Beta versions on 20 users from target audience. (Akom + Epstein)
  - Send app to advisers for comments/feedback (Epstein + Advisors)

### April 2018

- Press Outreach (Epstein + Just + Atlas Obscura + Frank)
- Launch Tour and begin User-generated content monthly vetting. (Akom + Epstein)

### May-July 2018

- Test tour on 20 target audience members (Akom + Epstein)
- Submit content to advisors for final review (Epstein + Advisors)
- Debug app and submit any updates to website and app stores. (Antinori)

### August – December 2018

- Summarize findings in white paper (Epstein + Advisors)
ORGANIZATION PROFILE

**Center for Independent Documentary**: Lead Producers

CID was founded in 1981 to collaborate with independent producers to create films and videos on issues of contemporary social and cultural concern. These programs have been broadcast nationally and locally on public and cable television, won numerous awards, and all are in distribution nationwide to educational markets.

**Walking Cinema**: Producers

Walking Cinema (formerly Untravel Media) was founded in 2003 on the belief that mobile media—like radio, film, and the written word—is capable of powerful storytelling. Most mobile media is currently a sedentary, immobile experience. Walking Cinema’s mobile applications move audiences through environments, putting them in touch with the people and stories of a place. The company staff includes writers, videographers, interface designers, and software programmers. Currently Walking Cinema develops mobile media for the museum, film, and education markets.

**Detour**: Production partner

Detour, headquartered in San Francisco, launched in February 2015, is a company dedicated to the creation, curation and propagation of audio walking tours. They have developed a technology and editorial team to develop tours around the world, currently running tours in 10 cities in North America, Europe, and North Africa. They are headed by Andrew Mason, founder of Groupon.

**Stanford Center for Spatial and Textual Analysis**: Production Partner

Stanford University’s CESTA is a place for a collaborative community of scholars to engage in creative spatial, textual and visual analysis to further research in the humanities. The Project is headed by Professor Zephyr Frank of the history and urban studies departments.

FUNDRAISING PLAN

Walking Cinema has received two grants from the Rainin Foundation for this project totaling $15,000. The project has also received funding from the Silicon Valley Bank ($1000) and ZenDesk ($1500). The project team plans to apply again to these organizations for further funding for this prototype. The project team also plans to apply for a California Humanities Council for a California Documentary Project Production grant this fall. We have also pursued applying for commissioned funding from ITVS (http://www.itvs.org/funding/edf) which has had several meetings with the production team and shown great interest in the project. We will also apply for funding from the Sundance Foundation’s New Frontiers program. The project was shortlisted for Sundance’s augmented reality fellowship and we are waiting to hear back on that opportunity.

While this project has not received NEH funding, our prior project, WALKING CINEMA: Murder on Beacon Hill, received a $50,000 NEH Digital Humanities Startup grant in 2008.
BIBLIOGRAPHY

Akom, A. A. “The Racial Dimensions of Social Capital: Toward a New Understanding of Youth Empowerment and Community Organizing in America's Urban Core.”


June 7, 2016  
National Endowment for the Humanities  
Room 426  
1100 Pennsylvania Avenue, NW  
Washington, D.C. 20506

To Whom It May Concern,

I am pleased to express our strong support for the proposal by the Center for Independent Documentary (CiD) to develop the new media project *Walking Cinema: Museum of the Hidden City*. This exciting new project dovetails with important initiatives that I direct here at Stanford, including the Human Cities Initiative in the Program on Urban Studies and the Spatial History Project. Both of these initiatives aim to contribute to broader public knowledge through digital media and collaborations with practicing planners and artists in the urban sphere. As such, our community has both the expertise and the interest required to contribute to *Walking Cinema*. More specifically, as director of the Spatial History Project, I have published widely in peer-reviewed venues on subjects relating to digital history and urban spaces. Recent highlights along these lines would include my chapter on the practice of spatial history in Goldberg and Svensson's *Between the Humanities and the Digital* (MIT, 2015), as well as my recently completed Mellon Foundation project focused on crowdsourcing for humanities research. In short, I am an active participant in the production of knowledge and scholarly debates directly related to the content and ambition of *Walking Cinema*. Finally, as director of two major programs at Stanford, I have experience in supporting and mentoring collaborative projects at scale.

My role, and that of my research lab and undergraduate program, will be to provide two layers of support for the project. First, I will provide direct academic support through advising and consulting with the *Walking Cinema* team. This will involve regular meetings, review of work in progress, and contributions to the written materials associated with the project. Second, I will leverage resources in the Spatial History Project and Urban Studies to provide supplemental support for *Walking Cinema*. I have budgeted $6,000 in undergraduate research assistance to this end. Additionally, I plan to encourage Urban Studies students to consider working as interns on the project as it develops in San Francisco. Needless to say, our Urban Studies majors are keenly aware of the issues surrounding access to housing and the history of struggles for a place in the city in the past. Thus, I see *Walking Cinema* as a wonderful opportunity for student engagement and participatory learning.

Finally, and perhaps most importantly, I see *Walking Cinema* as a prime example of the
intersection of academic and public knowledge production. The team surrounding Michael Epstein is truly unparalleled in its experience and previous track record in producing immersive and interactive projects. This leads me to conclude that the resources, time, and effort applied by my team to this project will be put to the very highest use.

Sincerely,

Zephyr Frank
Professor of History
Barbara Finberg University Fellow in Undergraduate Education
Director, Program on Urban Studies
Director, Spatial History Project
ZEPHYR FRANK

Department of History
Stanford, CA 94305-2024
Tel. (650) 723-9520
zfrank@stanford.edu

June 2016

POSITIONS
Stanford University, Professor, 2015-
Stanford University, Associate Professor, 2008-2015
Stanford University, Assistant Professor, 2000-2008
Illinois State University, Lecturer, 1999-2000

Visiting Associate Professor, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, April-July 2012.

EDUCATION
Ph.D. in History, 1999
University of Illinois, Urbana-Champaign
M.A. in History, 1993
University of California at Los Angeles

HONORS
Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford University, 2016-2017
Barbara Finberg University Fellow in Undergraduate Education, 2015-2020
Dean’s Award for Distinguished Achievements in Teaching, Stanford University, 2008
Graves Award for Excellence in Humanities Teaching, administered by Pomona College in conjunction with the ACLS, 2008
Fellow, Stanford Humanities Center, 2003-2004
Fulbright-Hays Dissertation Research Fellowship, Brazil, 1997

CURRENT GRANTS, SPONSORED RESEARCH, AND FELLOWSHIPS
2012-2015: Lead PI for “Crowdsourcing in the Humanities,” Andrew W. Mellon Foundation, $778,000
2012-2016: Director and lead PI, “Center for Spatial and Textual Analysis,” continuing baseline funding, Dean of Research, Stanford University, $325,000
2011-2016: PI for Media Places, Wallenberg Network Initiative, directly administer $375,000 (indirectly responsible for $1,100,000)
BOOKS & EDITED VOLUMES


De la plata a la cocaína: las cadenas de materias primas de América Latina y el desarrollo de la economía, forthcoming (Mexico City: Fondo de Cultura Económica, 2016), translated version of From Silver to Cocaine.

June 7, 2016

To Whom It May Concern:

I am writing in delighted support of the proposal by the Center for Independent Documentary (CiD) to develop the new media project Walking Cinema: Museum of the Hidden City. I am eager to serve as an adviser on the project, and I look forward to making a contribution to the effort.

I am the author of three books about the history, design and politics of low-income housing in the United States, and co-editor of the recent volume, Public Housing Myths: Perception, Reality and Social Policy. All of these books underscore the necessity to understand the history of housing in a grounded way, and to learn from multiple points of view—from low-income residents, from their wealthier neighbors, from developers, designers, social workers, legal aid attorneys and public officials. In my books, I have endeavored to let multiple voices be heard, but it will be even better to have the complexity of urban development revealed through the medium of film. This new Walking Cinema project, augmented with the latest in virtual reality technologies, will enable and enhance place-based learning from those who have lived through periods of contested change. Those who are empowered to tell their own stories can best construct neighborhood knowledge; this spirit undergirds the project proposed by Michael Epstein and his team. I am especially pleased that they have chosen San Francisco as the key site for this project, since it is one of the cities where I am currently conducting research. A walking tour project that helps elucidate the history and the challenges of life in one of the nation’s most expensive housing markets seems a wholly worthwhile and most timely venture. Using an immersive film experience to help the general public understand the confluence of viewpoints about an evolving neighborhood is both a fascinating enterprise and an important contribution to urban studies. I look forward to assisting CiD with contacts in the affordable housing field in San Francisco, and with students at MIT who have been working on new applications of virtual reality technologies in urban settings.

Yours sincerely,

Lawrence J. Vale
Ford Professor of Urban Design and Planning
Department of Urban Studies and Planning, MIT
Past President, Society for American City and Regional Planning History
Lawrence J. Vale

Department of Urban Studies and Planning
Massachusetts Institute of Technology
77 Massachusetts Avenue, Room 10-485
Cambridge, MA 02139
(617) 253-0561; e-mail: ljvale@mit.edu; Date of Birth: [b] (6)

EMPLOYMENT
Ford Professor of Urban Design and Planning, Department of Urban Studies and Planning, Massachusetts Institute of Technology, Head of Department, 2002-2009. Previously, Assistant Professor and Associate Professor, MIT, 1990-2002.

EDUCATION
Amherst College, Amherst, MA;
New College, Oxford University, England;
   Doctor of Philosophy in International Relations, June 1985.
Massachusetts Institute of Technology, Cambridge, MA;

SELECTED PUBLICATIONS

Selected Books:
Imaging the City: Continuing Struggles and New Directions (Center for Urban Policy Research, Rutgers, 2001) Co-editor with Sam Bass Warner, Jr.

Selected Articles and Book Chapters


**OTHER FELLOWSHIPS, HONORS and AWARDS**

- President, Society for American City and Regional Planning History, 2011-2013.
- Bousfield Distinguished Visitor in Planning, University of Toronto, 2013.
- Selected by MIT for Ford Professorship (endowed chair), July 2009-present.
- MIT Department of Urban Studies and Planning Students’ Award for Outstanding Contribution to Student Life, 2008; Award for Excellence in Advising, 2013.
- John M. Corcoran Award for Community Investment, given for “Excellence in Housing Education” by the Commonwealth Tenants Association, 2004; citations from the Massachusetts House of Representatives and Senate.
- "Place Research" Award from the Environmental Design Research Association (EDRA) and *Places*, for research on public housing, 2000.
- Margaret MacVicar Faculty Fellowship, MIT-wide award for excellence in teaching, 1999-2008.
- Chester Rapkin Award from the Association of Collegiate Schools of Planning for Best Professional Paper, 1997.
- Guggenheim Fellowship for work on American public housing, 1995-96.
- Elected to Phi Beta Kappa, Amherst College, 1981.
June 1, 2016  
National Endowment for the Humanities  
Room 426  
1100 Pennsylvania Avenue, NW  
Washington, D.C. 20506

To Whom It May Concern,

I am pleased to express our strong support for the proposal by the Center for Independent Documentary (CiD) to develop the new media project Walking Cinema: Museum of the Hidden City.

As an internationally renowned scholar, thought leader, and speaker on urban issues - including affordable housing, people powered place-making, designing for the public good, community engagement for vulnerable populations, and making cities smarter through participatory planning practices that produce small and socially catalytic neighborhoods that are more affordable, livable, walkable, workable, and equitable for all – I am delighted to write this letter of support for the Walking Cinema: Museum of the Hidden City team. In recent years I have been named a 21st Century Eco-visionary and have also been an Echoing Green and Knight News Challenge Finalist, winner of the Robert Woods Johnson Health Award, and recipient of other honors from Stanford, UC Berkeley, and the University of Pennsylvania. In 2011 I founded I-SEEED – a non-profit committed to the equitable design and development of cities, neighborhoods, and schools. I-SEEED’s mission is to use technology to build informed and engaged communities where everyone can live, learn, work, and thrive. My most recent enterprise, Streetwyze is a mobile platform that unleashes the power of local knowledge to improve community engagement and equitable development. Streetwyze was named by the White House as one of 12 new innovative data tools that can help Americans climb the Economic ladder and is a platform provider for Rockefeller Foundations 100 Resilient Cities.

Given my breadth and depth of experience at the intersection of technology, storytelling, and urban issues, I believe that Walking Cinema – by combining easy to use, and engaging technology with the important, and salient, topic of affordable housing has the potential to significantly impact the national dialogue around the changing nature of our American cities.

As a national expert in using the power of technology to transform cities and schools, for all peoples, especially the most vulnerable peoples - I plan to serve as an advisor to the project and provide feedback on the framework, content, and ultimate dissemination of Walking Cinema locally, regionally, and nationally.

The Walking Cinema team is unique in their ability to execute on this important project and I have no doubt that the product that is delivered will notably impact not only the arts, but also humanities ideas, themes, and scholarship, reach communities & everyday people, and move larger national conversation around affordability and urban issues forward.

Sincerely,

Antwi Akom  
Associate Professor – San Francisco State University  
Executive Director – I-SEEED  
CEO - Streetwyze
Antwi A. Akom Ph.D.
San Francisco State University
1600 Holloway Drive
SF, CA 94132

EDUCATION

University of Pennsylvania, Ph.D. – Urban Sociology
Awards: American Educational Research Association (AERA) Dissertation Award

University of Pennsylvania, M.A. – Urban Sociology
Awards: Distinction in Qualifying Examinations

Stanford University, M.A.

University of California, Berkeley, B.A.

PROFESSIONAL EXPERIENCE

Streetwyze, 2013-Present
Co-Founder/CEO

Institute for Sustainable Economic, Educational and Environmental Design (ISEEED), 2012-Present
Co-Founder/Executive Director

Lawrence Berkeley National Laboratory, 2012-2013
Research Scientist/Visiting Professor
Environmental Energy and Technologies Division

Director of STEM Education, 2007--present
$55M Green Energy Technology College and Career Pathway Project
The Green Corridor (http://www.ebgreencorridor.org/clean_energy.php)
ISEEED/UC Berkeley

San Francisco State University, 2004-present
Associate Professor (2010-present)
Assistant Professor (2004-2010)

University of California - Berkeley, 2002-2004
Research Associate, Socially Engaged Research, The Institute for the Study of Social Change

University of California - San Francisco, 2001-2003
Research Associate, Institute for Health Policy Studies, Health Disparities in Minority Communities

RESEARCH SUPPORT (Selected)

Funds Currently Held $2.5M ($5M over last two years)
The California Endowment: $250,000  
Project Title: Mapping to Mobilize: Digital Organizing and Community Engagement  
Funding Period: Aug 2015-Aug 2016  
Principal Investigator Antwi Akom, I-SEEED  

The Kresge Foundation: $400,000  
Project Title: Community-Driven Data and Env. Justice Screening  
Funding Period: Dec 2014-Dec 2016  
Principal Investigator Antwi Akom, I-SEEED  

The Surdna Foundation: $200,000  
Project Title: People as Sensors: Digital Technology for Civic Innovation and Environmental Design  
Funding Period: Dec 2014-Dec 2015  
Principal Investigator Antwi Akom, I-SEEED  

The Hewlett Foundation: $400,000  
Project Title: A Global Partnership for Sustainability Development Data  
Funding Period: Jul 2015-Jul 2016  
Co-Investigator I-SEEED w. S. Khagram  

PUBLICATIONS  

FORTHCOMING BOOKS  
Innovation Out of Poverty (Under-review The New Press).  

FELLOWSHIPS & AWARDS (Selected)  
- TEDx Talk Innovation Out of Poverty https://www.youtube.com/watch?v=YvrLFgikLZQ 2015  
- Knight News Challenge Finalist Social Innovation & Democratizing Data, 2015  
- 21st Century Eco-Visionary Award, Partnership for Democracy in Education, 2015  
- Black Male Achievement, Open Society Foundation, Semi-Finalist, 2014  
- Echoing Green Finalist, 2013  

PEER REVIEWED ARTICLES & BOOK CHAPTERS  

2016  
Akom, Antwi. YPAR 2.0: How Technological Innovation and Digital Organizing Sparked a Food Revolution in East Oakland  
Qualitative Studies in Education (In Press).  

2015  

2015  
In Noguera, Pedro, Pierce, Jill, and Ahram, Roey (Eds.) Race, Equity, and Education: Sixty Years from Brown. Springer. New York.  

2014  
Akom, A.A., Shah, A., &. Nakai, A. Visualizing Change: Using Technology and Participatory Research to Engage Youth in Urban Planning and
June 1, 2016

National Endowment for the Humanities
Room 426
1100 Pennsylvania Avenue, NW
Washington, D.C. 20506

To Whom It May Concern:

I am pleased to express my strong support for the proposal by the Center for Independent Documentary (CiD) to develop the new media project Walking Cinema: Museum of the Hidden City. The Walking Cinema team brings tremendous skill and experience to this project, which uses mobile technologies to provide audiences with the opportunity to encounter affordable housing through the different voices of those who live it, create it, and make meaning of it. Due to the immediate and immersive nature of this work, it has the potential to change not just how people view poverty and affordable housing, but how they view their city.

While San Francisco is well known for its ever-escalating housing prices, in fact no city in the US has an adequate supply of affordable housing or an effective strategy for softening local resistance to the production of affordable housing. Walking Cinema: Museum of the Hidden City has an important contribution to make to the fields of affordable housing, community development, and urban planning because it emphasizes the importance of first-hand knowledge and the value of place in bringing the topic of poverty housing to the foreground. A gate, a playground, a stoop, or a mailbox take on new meaning as the audience learns first to see them and then to consider the possibility that they might also be places of containment, integration, insecurity, or opportunity. Affordable housing shifts from some place ‘they’ occupy, the territory of the other, to something familiar, a place I know. The potential impact of this change of perspective is significant.

I am an academic working in the discipline of urban planning, and my research focuses on affordable housing and systems of poverty management, including the redevelopment of public housing. My research has investigated the city of San Francisco’s recent efforts to redevelop its severely distressed public housing communities using the HOPE VI and Hope SF programs; as a result, I am familiar with the political and institutional landscape that has shaped the most recent efforts to redevelop public housing and promote economic integration in the city’s few remaining high poverty census tracts. As an advisor on the project, I will help the team understand the current policy framework that regulates affordable housing and the ways that it manifests in the landscape of the city. For the pieces of the project focused on contemporary affordable housing developments, I will help assure that the work is grounded in the political and institutional framework that shapes the provision of affordable housing in the city.
If you have any questions about this project or my role as advisor, please feel free to contact me by phone at (515) 294-5289 or email at jrong@iatate.edu. Thank you for considering this important project for NEH support.

Sincerely,

[Signature]

Jane M. Rongerude, PhD
Assistant Professor
JANE RONGERUDE, PhD
Curriculum vitae
Feb 2016

Iowa State University
146 College of Design
Ames, IA 50011
515.294.5289
jrong@iastate.edu

EDUCATION
Ph.D., University of California, Berkeley. Dept of City and Regional Planning, Dec 2009
M.C.P., University of California, Berkeley. Dept of City and Regional Planning, Dec 2001
B.S., Portland State University. Environmental Studies, Aug 1998

ACADEMIC APPOINTMENTS
2013 – 2014. Faculty Director, GPIDEA Community Development Masters Degree Program, Iowa State University
2010 – present. Assistant Professor, Department of Community and Regional Planning, Iowa State University

PUBLICATIONS & REPORTS
Refereed journal articles


JANE RONGERUDE, PhD
Curriculum vitae
Feb 2016

Book Reviews

Manuscripts in submission

Reports


HONORS, AWARDS, & FELLOWSHIPS
2014 College of Design Outreach/Public Service Award, Iowa State University
2013 Tall Grass Prairie Workshop
2005 Research Fellow, Institute for the Study of Social Change, UC, Berkeley
TO: Michael Epstein, Museum of the Hidden City
FROM: Michael Frisch, Principal, The Randforce Associates, LLC
Professor of American Studies and History, emeritus
University at Buffalo, State University of New York
RE: Support/Advisory Role in NEH proposal for Walking Cinema project
DATE: June 7, 2016

I am pleased to confirm my enthusiastic interest in serving in an advisory capacity on this exciting project. I have enjoyed reviewing your proposal draft, and especially intrigued by our extensive recent phone discussions about it, and how I might be helpful.

This does really seem a good match for me, and vice versa. I am an urban historian with considerable familiarity with many of the humanities and historical issues about housing, development, planning, politics, administration and especially social impact that your imaginative project seeks to explore. I also have long and rich experience in public history, and in a range of engagements with innovative approaches to humanities dimensions through public programs, interactive exhibits, films and media projects, and new digital technologies, including history-inflected tour modalities. I am very familiar with NEH Public Programs and Digital Humanities projects, and have worked on these in many contexts, most of which have shared a focus on deepening humanities engagement in contrast to conventional and tired trickle-down dissemination projects simply projecting humanities content.

It will be exciting to bring this experience to bear in ways that support the humanities dimensions if the Walking Cinema approach to the complex history of affordable housing trajectories in San Francisco—and their broader implications for cities, housing, and social change in so many urban contexts across the country.

I also bring to the table a good deal of experience in leveraging digital humanities in transformational programs. There’s a lot in this experience that resonates with the goals of your project. There may be specific ways the results of this work—finding and then mobilizing the power of voice and memory through family and community oral history, and imaginative public history modes—may provide resources and approaches germane for the humanities-driven themes your itineraries and multiple perspectives invites the public to experience.

My more recent work developing PixStori, a free mobile app for combining photos with audio stories and memories, may be similarly helpful, in that it is unfolding a more general sensibility about short-
form, photo-prompted story gathering, at once more practical and easy to do but also the source of unique insights and power, through mobilizing the power of focus and concentration through responses to particular images, documents, settings, and faces. Irrespective of particular tools or modes, I can imagine a range of ways in which this sensibility and orientation might be helpful in the work you are undertaking. So my participation as an advisor can help add this orientation to the mix.

As we discussed, it might be most useful were the range of these vantages—from academic urban history scholarship to public engagement to digital humanities experiments—available for the advisory/consultative dimension of the project. I am more than aware (especially having served on multiple NEH grant review panels) how frequently proposals are front-loaded with “humanities credentials”—names, letterhead, and pro-forma commitment letters. And how often it stops at that, once the grant is received. I know, too, how much NEH is properly skeptical of what can become a hollow humanities pandering—the Endowment wants, expects, and hopes to encourage, really meaningful interaction, through bringing humanities scholars into project work more actively.

I share this sensibility and was delighted to discover that you do too- that you want your advisors to be drawn on actively. I’m on board, and as the project moves forward, I look forward to helping you advance what seems such a highly original and significant project, one from which I am excited about learning a great deal!.

Michael Frisch, Principal, The Randforce Associates, LLC
University at Buffalo, SUNY, Professor of American Studies and History, emeritus
ABBREVIATED RESUME

MICHAEL H. FRISCH

THE RANDFORCE ASSOCIATES, LLC/ TALKING PICTURES LLC
THE INNOVATION CENTER, BUFFALO NIAGARA MEDICAL CAMPUS
640 ELLICOTT STREET, BUFFALO NY 14203
(716) 218-7389   Email: mfrisch@buffalo.edu

I. EDUCATION
1967, 1965    Ph.D., M.A.    Princeton University
1963         B.A.               Tufts University (Magna Cum Laude, Phi Beta Kappa)

II. ACADEMIC/PROFESSIONAL POSITIONS
State University of New York at Buffalo:
    Professor of American Studies & History / Senior Research Scholar, emeritus
    Chair, Department of American Studies, 1984-87; 1988-91
    Director, Rockefeller Humanities Fellowships Program, 1990-94
Principal, The Randforce Associates, LLC, 2002 – present; Talking Pictures, LLC 2014--
    Consultants on Digital Audio-Video Indexing for Oral History & Multimedia Documentary
    University at Buffalo Technology Incubator, Baird Research Park
    Developer of PixStori, mobile app for photo-audio documentation, including short-form oral history

III. AWARDS, GRANTS, FELLOWSHIPS, HONORS, MAJOR POSITIONS [Recent Items]
2009-10 President, Oral History Association [elected]
2007-    Board of Directors, New York Council for the Humanities
2002-06 Board of Directors, Federation of State Humanities Councils
2001    U.S. Department of State/Japanese Association for American Studies, International Conference
        Keynote Paper and Lecture Tour, Korea and Japan
1999    Imagining America grant award, Woodrow Wilson National Fellowship Foundation and White
        House Millennial Program, for piloting Pan-American Exposition 1901-2001 3-D documentary.
2000    President, American Studies Association, for 2000-2001 [elected]
1996    Executive Board, Organization of American Historians [elected], 1996-1999
1995    Oral History Association 1993-1995 Best Book Prize, for Portraits in Steel
1992    Fulbright Chair in American Studies, University of Venice, Italy
1990    Rockefeller Foundation, grant for "Multi-Cultural Synthesis" Post-Doc Center at SUNY-Buffalo
1989    U.S. State Department Grant, Conference Keynote Paper and Lecture Tour, Korea and Japan
1988-94 Board of Directors, New York Council for the Humanities
1986-96 Editor, The Oral History Review

IV. SELECTED PUBLICATIONS
Books:
1993    PORTRAITS IN STEEL, with photographer Milton Rogovin (Ithaca: Cornell University Press)
        [1995 Book Prize, Oral History Association]
1990    A SHARED AUTHORITY: Essays on the Craft And Meaning of Oral and Public History (Albany:
        State University of New York Press)
1982    WORKING-CLASS AMERICA: Essays on Labor, Community, and American Society, Co-edited
        with Daniel J. Walkowitz (Urbana: University of Illinois Press)
1972    TOWN INTO CITY: Springfield, Massachusetts and the Meaning of Community, 1840-1880,
        (Cambridge: Harvard University Press, [Harvard Studies in Urban History #2])
Selected Major Articles and Book Chapters: Recent

2016  “Oral History in the Digital Age: Beyond the Raw and the Cooked,” Australian Historical Studies, Special Issue [in press]


2001  “Prismatics, Multivalence, and Other Riffs on the Millennial Moment: Presidential Address to the American Studies Association” American Quarterly 53/2 (June, 2001), 193-231

V. PROFESSIONAL ACTIVITIES [Recent]

2010-2012 Team Leader, “Oral History in the Digital Age” IMLS National Leadership Grant

2009-2010 President, Oral History Association [Elected]

2000-2001 President, American Studies Association [Elected]

2007- Board of Directors, New York Council for the Humanities

2002-2006 Board of Directors, Federation of State Humanities Councils
June 1, 2016  
National Endowment for the Humanities  
Room 426  
1100 Pennsylvania Avenue, NW  
Washington, D.C. 20506  

To Whom It May Concern,  

I am pleased to express my strong support for the proposal by the Center for Independent Documentary (CiD) to develop the new media project *Walking Cinema: Museum of the Hidden City*.  

I am an urban historian, and an associate professor of history in the Clark Honors College, at the University of Oregon. My book *Making the Mission: Planning and Ethnicity in San Francisco* (University of Chicago Press, 2015) deals with the history of the built environment in twentieth-century San Francisco. If funded, I believe the Walking Cinema project will succeed in bringing rigorous history and urban planning scholarship to the public. By using mobile technology to create an immersive, place-based experience, featuring voices of people with firsthand knowledge, this project will have broad appeal. The project holds out the promise of engaging members of the public who would not likely otherwise be exposed to this important material.  

I have already done some preliminary consulting on the project, directing the producers towards relevant scholarship, and assisting with the analysis of specific sites. I will continue in this role as the project progresses. I have so far been impressed with the Walking Cinema team, and I believe they are the right people to produce this project.  

I hope these impressions are of use.  

Sincerely,  

Ocean Howell  
Associate Professor of History  
Clark Honors College  
Department of the History of Art and Architecture  
University of Oregon
**Ocean Howell**  
ohowell@uoregon.edu; 415-385-4703

**EMPLOYMENT**

Associate Professor of History, Clark Honors College, Department of the History of Art and Architecture, University of Oregon, Spring 2016 - .

Assistant Professor of History, Clark Honors College, Department of the History of Art and Architecture, University of Oregon, Fall 2010 - Spring 2016.

Lecturer, Department of Art and Architecture, University of San Francisco, Spring 2010.


Graduate Student Instructor, UC Berkeley:  
--"American Education and the American Dream," American Studies Program, Fall 2009;  
--"Historical Survey of Architecture and Urbanism," Dept of Architecture, Fall 2008;  


**EDUCATION**

Dissertation: "In the Public Interest: Space, Ethnicity, and Authority in San Francisco's Mission District, 1906-1973."  
Committee: Greig Crysler, Architecture (Chair); Paul Groth, Geography; David Henkin, History.

*University of California at Berkeley*, M.S., Architecture 2005.


**SCHOLARLY WORK**

*Books:*

**Digital Mapping Project:**

"Imagined San Francisco." A GIS-based public history project. In development with the Center for Spatial and Textual Analysis (CESTA), Stanford University.

**Book Chapter:**


**Peer Reviewed Journal Articles:**


**Catalog Chapters, Reviews, and Magazine Articles (selected):**


MULTI-PLATFORM JOURNALIST

10+ years experience writing, directing, and editing immersive public media.

- MIT-educated with deep understanding of media evolution, audience studies, digital media production, and game design
- Work featured in the Venice Biennale, SXSW, and several museums. Numerous awards from film festivals, museum industry, and the National Endowment for the Humanities.
- Product management experience focusing on customer-driven innovation, user research, agile development, and location-based experiences.
- Multi-lingual, with editing and writing experience in Spanish, Italian, and French.

WORK EXPERIENCE

Walking Cinema

Boston and San Francisco

Founder and Creative Director 2006-present

- Founded and run a mobile media software and production studio specializing in location-based storytelling for broadcast and museum clients.
- Founded StoryCode SF, a monthly meetup of producers and developers showcasing interactive and immersive story projects.
- Raised $300,000 in seed funding and startup grants from NSF and NEH. Bootstrapped to profitable, award-winning company.
- Recruited, guided, and edited work from a range of media producers, including public radio, documentary film, and animation.
- Developed a streamlined production process for multi-platform storytelling, utilizing Agile and multi-team production tools.

California College of Art

San Francisco, CA

Senior Lecturer 2014-present

- Design and teach a studio course in location-based story production titled “Landmarks, Memory, and Mobile Media”.

Location Labs

San Francisco

Director of Research (Part-Time) 2013-present

- Work closely with UX, Design, and Executive team on modeling the future of location-based applications.
- Designed a “customer immersion” program to drive qualitative and quantitative findings into engineering teams.
- Lead the product strategy, launch and marketing of a multi-platform direct-to-consumer mobile/web application for family location sharing and phone controls. [http://aquiestoy.movistar.es](http://aquiestoy.movistar.es).
- Manage the user feedback and analysis, feature prioritization, engineering specifications, and marketing strategy for the product.

**History Unwired**

**Director**

Boston and Venice, Italy

2003 & 2004-2005

- Formed “History Unwired: Venice Frontiers,” an initiative between MIT and the University of Venice to design a functional prototype of mobile travel applications.
- Project delivered at the 2005 Venice Biennale who subsequently licensed the content and platform.
- Worked closely with local stakeholders including tour guides, tourists, and producers to create content that was both innovative and character-driven.

**Radio Producer**

San Francisco-based

1998-2002


**EDUCATION**

**Massachusetts Institute of Technology (M.I.T.)**

Cambridge, MA

Science Masters (S.M.) in Comparative Media Studies

2002-2004

- Graduate work in design of multiplatform, location-based narrative applications.
- Worked with the Education Arcade and Prof. Eric Klopfer testing and critiquing early Augmented reality apps promoting in-situ science education.

**Harvard University Extension School**

Cambridge, MA

Business and History Coursework

2006-2009

- Marketing, Visual Studies, Social Entrepreneurism, Global and Local History

**Vassar College**

Poughkeepsie, NY

B.A. in Science, Technology and Society

1989-1993

- Honors and Awards: Phi Beta Kappa, Departmental and General Honors
**SCHOLARLY AND MASS MEDIA PUBLICATIONS (ABBREVIATED)**

**Journalism**

**Academic**

**Speaking Events**
- 2010 Digital Heritage Conference and Sandberg Institute
  Workshop: “Mobile Narrative Development.” Designed workshop and presentations for conferences and film industry in Amsterdam, NL.
- SATE (Storytelling, Architecture, Technology, and Education) 2009, Panel on Interactivity and Immersion for the iPhone Generation.

**HONORS AND AWARDS**

**Industry**

**Academic**
- Phi Beta Kappa. Hugh Hampton Scholarship, De Florez Fund for dramatic production, MIT Art Grant for “News Lab” a topical jazz/poetry radio show. “Best Original Poetry”, MIT Mic Check.
June 1, 2016
National Endowment for the Humanities
Room 426
1100 Pennsylvania Avenue, NW
Washington, D.C. 20506

To Whom It May Concern,

On behalf of Detour, I am pleased to express our strong support for the proposal by the Center for Independent Documentary (CiD) to develop the new media project Walking Cinema: Museum of the Hidden City. We believe that the Museum of the Hidden City project will bring a range of local and national audiences to explore the rich history and social impact of affordable housing in San Francisco and in cities across the country.

Detour is dedicated to creating a new kind of immersive, compelling, and deeply location-based style of audio storytelling. We make audio documentaries in the form of audio walking tours led by people who are tightly tied to the story and the neighborhood itself. Walking a Detour builds empathy—you it’s as close as you can get to “walking in someone else’s shoes.” Walking Cinema: Museum of the Hidden City shares this sentiment and the goal of changing how people understand and interact with the places they live, and the people they encounter.

We’re aware of Michael Epstein’s long pedigree as an innovator in this new form of documentary, and are happy to support Walking Cinema and his other endeavors. Once Walking Cinema comes to fruition, it could be a model project for Detour Platform, a new way of creating and distributing this kind of work around the world.

Sincerely,

Jorge Just
Senior Producer
Detour.com
June 6, 2016  
National Endowment for the Humanities  
Room 426  
1100 Pennsylvania Avenue, NW  
Washington, D.C. 20506

To Whom It May Concern,

On behalf of Atlas Obscura, I wish to express our keen support for the proposal by the Center for Independent Documentary (CiD) to develop the new media project Walking Cinema: Museum of the Hidden City. We believe that the Museum of the Hidden City project will bring a range of local and national audiences to explore the rich history and social impact of affordable housing in San Francisco and in cities across the country.

Atlas Obscura is a digital media venture with a mission to help people experience a sense of wonder and curiosity. We believe there is something new to discover, every day, all over the world—and around the corner. We also run real-world chapters, Obscura Societies, in which we run a regular program of local explorations designed to reveal the hidden gems of the region and get enthusiastic locals and our readers off the computer and out exploring.

Walking Cinema: Museum of the Hidden City is exactly the kind of project we at Atlas Obscura wholeheartedly love. It is a meaningful and scalable way to explore important and hidden layers of history and society in an engaging way. Through our local San Francisco Obscura Society chapter, we would work with the Walking Cinema team to craft live experiences around the project. Our editorial team would likely cover the Museum of the Hidden City with our global audience as well – we believe the stories in it will help people see their own cities differently, everywhere.

I have collaborated with members of the Walking Cinema team for a variety of educational entertainment programs, and have been a participant in more, and have tremendous respect for their capabilities and sensibilities. We very much look forward to this project.

Sincerely,

Bart Bernhardt  
Chapter Head, San Francisco Obscura Society  
Atlas Obscura
The project team has worked on several handheld media projects that correspond to the MoHC format, but possibly the most apt is our 2010 project “Walking Cinema: Murder on Beacon Hill.” This adaptation of the (NEH Funded) American Experience Film “Murder at Harvard” won numerous awards and is still running in the streets of Boston today.

Website:  www.parkmanmurder.com
Content and download area:  http://parkmanmurder.com/Parkman_Murder_History.html
## Budget Form

Applicant Institution: Center for Independent Documentary  
Project Director: Michael Epstein  
Project Grant Period: 1/1/2017 to 12/31/2018

### 1. Salaries & Wages

<table>
<thead>
<tr>
<th>Role</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Project Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Director Michael Epstein</td>
<td>$10,000 (10%)</td>
<td>$10,000 (10%)</td>
<td>$10,000 (10%)</td>
<td>$30,000</td>
</tr>
<tr>
<td>Animator, Laura Piraino</td>
<td>$15,000 (15%)</td>
<td>$15,000 (15%)</td>
<td>$15,000 (15%)</td>
<td>$45,000</td>
</tr>
<tr>
<td>Developer Max Antinori</td>
<td>$5,000 (5%)</td>
<td>$5,000 (5%)</td>
<td>$5,000 (5%)</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

### 2. Fringe Benefits

<table>
<thead>
<tr>
<th>Role</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Project Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Director Michael Epstein</td>
<td>$1500 (15%)</td>
<td>$1500 (15%)</td>
<td>$1500 (15%)</td>
<td>$4500</td>
</tr>
<tr>
<td>Animator, Laura Piraino</td>
<td>$1500 (15%)</td>
<td>$1500 (15%)</td>
<td>$1500 (15%)</td>
<td>$4500</td>
</tr>
</tbody>
</table>

### 3. Consultant Fees

<table>
<thead>
<tr>
<th>Role</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Project Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actors/Voiceover</td>
<td>$500/day (1 day)</td>
<td>$500/day (1 day)</td>
<td>$500/day (1 day)</td>
<td>$1500</td>
</tr>
<tr>
<td>Academic Advisors</td>
<td>$500/day * 6 advisors (6 days)</td>
<td>$3,000/day * 6 advisors (6 days)</td>
<td>$3,000/day * 6 advisors (6 days)</td>
<td>$6,000</td>
</tr>
<tr>
<td>User Testers</td>
<td>$500/test (10 tests)</td>
<td>$500/test (20 tests)</td>
<td>$500/test (20 tests)</td>
<td>$1,500</td>
</tr>
<tr>
<td>Researcher (From Stanford CESTA Lab)</td>
<td>$3,000/semester (1 semester)</td>
<td>$3,000/semester (1 semester)</td>
<td>$3,000/semester (1 semester)</td>
<td>$6,000</td>
</tr>
<tr>
<td>Mapping Project Director</td>
<td>$500/day (5 days)</td>
<td>$2,500/day (5 days)</td>
<td>$2,500/day (5 days)</td>
<td>$5,000</td>
</tr>
<tr>
<td>Oral History Expert</td>
<td>$500/day (5 days)</td>
<td>$2,500/day (5 days)</td>
<td>$2,500/day (5 days)</td>
<td>$5,000</td>
</tr>
<tr>
<td>User Testing Assistance</td>
<td>$500/day (3 days)</td>
<td>$1,500/day (3 days)</td>
<td>$1,500/day (3 days)</td>
<td>$3,000</td>
</tr>
<tr>
<td>Audio Production Editor</td>
<td>$500/day (3 days)</td>
<td>$1,500/day (3 days)</td>
<td>$1,500/day (3 days)</td>
<td>$3,000</td>
</tr>
<tr>
<td>Center for Independent Documentary</td>
<td>5% of grant money (this grant)</td>
<td>5% of grant money (this grant)</td>
<td>5% of grant money (this grant)</td>
<td>$5,000</td>
</tr>
</tbody>
</table>
4. Travel

<table>
<thead>
<tr>
<th>Animator, Laura Piraino</th>
<th>3 * 5-day production trips (Fly from Boston to San Francisco Airfare: $600, p/d: $200)</th>
<th>1 trip</th>
<th>$1,600</th>
<th>1 trip</th>
<th>$1,600</th>
<th>$3,200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defensible Space Expert Production Trip</td>
<td>3-day trip to consult on landscape features (Fly from Oregon to San Francisco Airfare: $300, p/d: $200)</td>
<td>1 trip</td>
<td>$900</td>
<td></td>
<td></td>
<td>$900</td>
</tr>
</tbody>
</table>

5. Supplies & Materials

| Web storage | Web Storage for Project. $100/month | 12 | $1,200 | 12 | $1,200 | $2,400 |

6. Services

<table>
<thead>
<tr>
<th>Accounting</th>
<th>Hire accountant to track expenditures. $70/hour</th>
<th>5 hours</th>
<th>$350</th>
<th>5 hours</th>
<th>$350</th>
<th>$700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Equipment Rental</td>
<td>$500/day</td>
<td>10 days</td>
<td>$5,000</td>
<td>5 days</td>
<td>$2,500</td>
<td>$7,500</td>
</tr>
<tr>
<td>Studio Rental</td>
<td>$100/hour</td>
<td>10 hours</td>
<td>$1,000</td>
<td>5 hours</td>
<td>$500</td>
<td>$1,500</td>
</tr>
<tr>
<td>Printing and Reproduction</td>
<td>20/year</td>
<td>1 year</td>
<td>$20</td>
<td>12 months</td>
<td>$120</td>
<td>$140</td>
</tr>
<tr>
<td>Archival fig licensing</td>
<td>avrg $60/sec</td>
<td>0</td>
<td>$0</td>
<td>120 sec</td>
<td>$7,200</td>
<td>$7,200</td>
</tr>
</tbody>
</table>

7. Other Costs

8. Total Direct Costs Per Year | $64,220 | $59,170 | $0 | $123,390 |

9. Total Indirect Costs Per Year | $0 | $0 | $0 | $0 |

10. Total Project Costs (Direct and Indirect costs for entire project) | $123,390 |
11. Project Funding

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outright:</td>
<td>$100,000</td>
</tr>
<tr>
<td>Federal Matching Funds:</td>
<td>$0</td>
</tr>
<tr>
<td>TOTAL REQUESTED FROM NEH:</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

b. Cost Sharing

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant’s Contributions:</td>
<td>$17,390</td>
</tr>
<tr>
<td>Third-Party Contributions:</td>
<td>$6,000</td>
</tr>
<tr>
<td>Project Income:</td>
<td>$0</td>
</tr>
<tr>
<td>Other Federal Agencies:</td>
<td>$0</td>
</tr>
<tr>
<td>TOTAL COST SHARING:</td>
<td>$23,390</td>
</tr>
</tbody>
</table>

12. Total Project Funding

Total Project Costs must be equal to Total Project Funding  --->  ($123,390 = $123,390 ?)

Third-Party Contributions must be greater than or equal to Requested Federal Matching Funds  --->  ($0 ≥ $0 ?)
IMAGES AND OTHER WORK SAMPLES

The project team has assembled sample images and video demos of the MoHC app and website. The content can be viewed here: http://www.seehidden.city.

The website uses the parallax scrolling functionality mentioned in the design document.
NARRATIVE TREATMENT

WALKING CINEMA: MUSEUM OF THE HIDDEN CITY (MoHC) is an interactive documentary about the history of affordable housing set in the real world streets of San Francisco. Formatted as a smartphone-guided walking tour, the project will use GPS, immersive audio, and on-site installations to make audiences feel like they are exploring a highly interactive exhibit in a museum without walls.

The project will examine affordable housing history as it is revealed in the built environment, leveraging the range of affordable structures—SRO hotels, 1940’s public housing projects, and sleek new mixed-income developments—to convey a larger arc of affordable housing styles and corresponding social challenges. MoHC specifically focuses on the challenges of connecting affordable housing to the surrounding neighborhood, finding the proper role for the private sector in public housing, and looking at how mapping practices influenced the development of affordable housing.

The story is told via 4 separate walking tours each from a different perspective and in a different neighborhood. The tours cover the historical arc of affordable housing programs, from FDR's initial legislation in the 1930's to today's mixed income and inclusionary housing developments.

The four perspectives presented in MoHC are:

1) **The Developer**: Yusef Freeman is a dynamic urban planner specializing in the revitalization of poor neighborhoods through mixed income housing. Freeman heads up the West Coast office of McCormack Baron Salazar (MBS) and his main responsibility is the redevelopment of the storied and predominantly Candlestick Park neighborhood in this new post-stadium era. Freeman grew up in an urban section of Sacramento that went downhill economically and he saw predatory businesses arise and home values plummet. He is a firm believer in creating developments that attract market rate buyers while setting aside a majority of the units for economically-challenged residents. His viewpoint of the city emphasizes spaces and policies that can get various income brackets to mix. Walking with Freeman, audiences get an idea of how mixed-income housing is finding ways to connect a low-income, predominantly African American public housing households to middle class households and work opportunities. His tour also hits upon the theme of private sector involvement in public housing via the various incubators and high-end retail baked into the Candlestick development.

2) **Below Market Rate Matriarch**: the Ramirez family are first-generation Latino immigrants who fell on hard times during the economic downturn of 2008 and eventually found themselves sleeping in their car under the Golden Gate Bridge. After a stint in family shelters and cheap Single Room Occupancy hotels, the family of four entered and won the housing lottery for an affordable unit in a sleek luxury highrise called “NEMA”, next to Twitter's controversial new headquarters in the newly fashionable Mid-Market area. Walking with Ramirez, the matriarch of the family, her eye goes towards family and affordable components of the built environment. Her struggle is to find a clear path to economic stability, and as we walk with her we see how in the short run her proximity to high-end businesses and successful neighbors hasn’t increased her economic opportunities. Yesenia’s story brings up the lack of longitudinal research on the economic impact of mixing income levels in the same neighborhood.
3) **Justin Herman**: From 1959 to his death in 1971, Justin Herman led San Francisco’s Redevelopment Agency, growing its head count from 60 to more than 450. He was responsible for massive urban renewal projects in the Fillmore, Tenderloin, and Mid-Market neighborhoods much like his New York counterpart Robert Moses. We will use archival images, video, and scripted audio to give the viewpoint of the city’s most influential planner. Seeing the city through Herman’s eyes, audiences understand how he looked at cities as systems rather than communities. Scrutiny of Herman’s plans for the neighborhood, especially when seen in the contemporary environment, reveal blind spot for community, and particularly the post-war African American experience. A divisive highway, the “A-1, A-2” naming schemes, and the shunning of the street in his designs cue audiences into Herman’s top down approach to planning. Herman’s viewpoint also raises questions about racial justice, especially since the neighborhood was predominantly African American before urban renewal.

4) **The Peripatetic Historian**: Gary Kamiya is a Bay Area native who has written extensively on San Francisco and its urban history, especially from a pedestrian’s perspective. Kamiya’s 2013 Book COOL GRAY CITY OF LOVE was a NYT Bestseller and relates the history of the city through 49 walks through each square mile of San Francisco. Kamiya is the Editor in Chief of San Francisco Magazine and writes a local history column for the San Francisco Chronicle. Kamiya focuses his walk on the history of affordable housing in the Tenderloin, which may have the largest concentration of Single Room Occupancy hotels in the nation. He relishes in the little clues that he discovers in the doorways, sidewalk cracks, and signage of the neighborhood which reveal a legacy of activism to preserve the neighborhood in the face of giant tourist hotels and an expanding financial district. Gary focuses his walk on the challenges to a neighborhood that has a large swath of protected affordable housing, in between which market rate businesses and residential housing are quickly pouring in. He uses the streetscape to dig into this question of whether partial gentrification can make the neighborhood less isolated or more contentious.

These four walks and vastly different perspectives will culminate in a single walking tour through the ex-Theater District of San Francisco, featuring all of these perspectives combined at specific flash points in the built environment: a high end grocery store, a public park, entryways, preserved housing, and new construction. Thus the museum evolves into a walkable Roshomon, allowing audiences to see how one feature of the city can mean starkly different things to different individuals. MoHC thus leaves its audiences with a greater appreciation of the historic struggles and current challenges affordable housing faces in San Francisco, encouraging them to hunt for more clues around the city and remain tuned in as voters, neighbors, and public voices in quest to provide decent housing for all.

**User Experience**

**The App**

MoHC will be an app available for download from both the iTunes and Android Play store. MoHC will also have a mobile-optimized website designed for remote audiences who want to
experience the stories off-site. This “at home” version of the app will be covered later in this document. For now we will look at the design of the mobile app.

Image of the app’s landing page, indicating what users see as they scroll down the page.

Landing Page

The image above shows the landing page of the app where we will give a trailer for the overall experience and previews of each character’s walk. The tours have a suggested sequence starting with Ramirez’s walk and then going to roots of the inclusionary program in Justin Herman’s walk. After the specter of urban renewal is brought up in Herman’s walk, audiences go through the Candlestick neighborhood to get, in a sense, the apology for the treatment of minorities and mistaken design principles in Herman’s day. The Candlestick walk will show how some of the issues from the Herman-era projects have been solved, but it also raises the issues of lack of date on mixed income outcomes and scholarly critiques of the spatial management of poverty. Kamiya’s walk then examines a neighborhood that actually staved off the influx of market rate and tourist developments through legislation. He brings up both the positive and economically isolating impact of those decisions.

MoHC ends with the “Mid-Market Mashup,” which presents all four characters’ perspectives layered on several sites in the Mid-Market neighborhood. This culminating tour is designed to leave audiences with an appreciation of the financial, racial, and spatial challenges of creating affordable housing.
Selecting a specific tour will bring users to the details view of the walk. We will prominently display practical information for each walk including duration, directions, starting point, and recommended hours for taking the tour. Audiences will also get a content preview via a written description and audio file designed to bring out the immersive qualities of the experience and the fascinating places featured in the tour.

In addition, audiences will see images of installations and augmented reality (AR) experiences along the walk towards the bottom of the page. (See description on following pages.)

Finally, we will also include links to primary sources that are featured in the tour narrative and interviews. We have found that if the narrative strikes a balance between narrative pace and exposition, audiences will be hungry for more information on the documents, letters, and characters mentioned in the walk. These will be pulled from the rich archives at the San Francisco Public Library and other archives used in production. Examples include images of racial harmony from Justin Herman’s last report on housing before his death in 1973, anodyne pamphlets on the simple process of urban renewal from the 1950’s, and letters the Ramirez family received denying the application for the affordable unit they won due to a slight decline in their credit score.
The top menu also offers a map view of the starting points of each tour. Pushing on a tour icon brings up the tour's name and a link to its details view. For the prototype we will develop the Ramirez tour only. Other tours will be grayed out with some information available on their storyline and geography.
Walk Overview

While on tour, the path will be clearly marked on a location-aware map which will also indicate the audience member’s current position.

The content will be predominantly audio and divided into short chapters (here we see a chapter on “Kids in the Tenderloin” is two minutes long and plays out over a block and a half.)

Generally, we are targeting the length of the tours to be about 25 minutes of content and with stops and installation time, to amount to 45 minutes or the length of a nice lunch break.
While in tour, one’s surroundings are the focus, not the screen. Thus during playback we make controls very easy to use and a thumbnail of the map, which is expandable if users want an overview of where they are on the entire tour. But the idea is that this interface is ignored while walking.

The playback interface will also indicate how far the audience is from the next interactive installation or augmented reality stop.

Buttons at the top of the screen will allow users to easily access the camera, synch the playback with others in their group, expand the map or view the album of photos they’ve taken in tour.
Augmented Reality

Augmented Reality is a feature that places images, video, or animation on top of the image seen through your smartphone’s camera. In the case of MoHC we will be using Augmented Reality to see past plans for a neighborhood, look into the interiors of buildings, and present archival materials in situ. Walking Cinema has already integrated this technology into our platform for the award-winning “WALKING CINEMA: POSTS FROM GLOUCESTER” tour.
Installations and Peephole Cinema

As part of our prototyping process we tested a “Peephole” cinema installation in the lobby of NEMA where Yesenia Ramirez lives. Made from a reclaimed wood spool and a simple looping video screen, the 1-minute video inside told the story of how BART (subway) construction on Market Street led to the destruction of small businesses and community cohesion in the 1970’s and 80’s. The installation was highly successful as reported by building management (“Everyone, young and old, stopped to look through the peephole”) and through interviews with audiences who texted us for more information. We believe that such formats for showing archival video (such as the 1937 USHA “Housing in Our Time”) will be a highly effective means of capturing audiences “where they are.” This highly visible format will help create general awareness of the project. On such installations we plan to advertise an SMS campaign that provides more information about the specific video shown and forms a gateway to download the MoHC app.
THE WEBSITE

*The website will extend the walkable app to include more backstory on the characters and their environments.*

As mentioned above, the prototype will include an “at home” version of the walking tour designed to reach audiences who don’t actually go on site for the content. Using a transmedia approach to storytelling, the web version will NOT be merely video capture of the walking route and audio content. Rather the “at home” version will extend the narrative, providing more backstory on the characters and the neighborhoods they tour.
Modal allowing visitors to go to the mobile app (Ready to Tour) or the off-site experience (Virtual Tour)

It should be noted that when users first land on the project website they will be asked if they want to take the tour or have a virtual visit. The Virtual Visit will lead them to the web experience and if they choose “Ready to Tour” they will be directed to the appropriate app store to download the mobile app.
Parallax scrolling makes for a lively mix of text and images from the Ramirez’s story.

This responsive (desktop and mobile compatible) website will make use of text, images, animations, and 360 video of the streetscape for each walk. Using the interactive parallax scrolling technique (see, for instance, the Guardian’s “Firestorm” story,) the web version will play out like a multimedia film that driven by your rate of scrolling. (sample video of the website is here: http://www.seehidden.city/#excerpt.)
Scrolling brings to life an animation of how the Ramirez family fought to claim their affordable unit in the NEMA building.

For the Ramirez story the web version will go much deeper into her backstory living in a family shelter with her husband and two small children. It will chronicle her challenges to find economic stability and elation after she won the housing lottery. Yet even the win, was only a first step. It took a kind of chutes and ladders game of petitioning the city and the developer to get her application accepted with a slightly below required credit score.
Interactive 360 video in the website will allow audiences to see the neighborhood from Yesenia's perspective.

Yet even after this “The Jeffersons” style story of “movin’ on up” is accomplished, the story begins to ask deeper questions about how appropriate inclusionary housing is for households that need more support. The Ramirez family still struggles to pay its highly reduced rent and the building manager reports issues with below market rate residents that his staff isn’t prepared to deal with. He laments the lack of training for the residents and ongoing supportive services. This lack of preparedness extends to the surrounding neighborhood where a massive influx of tech companies has businesses rapidly flipping from affordable to upscale. The app will allow audiences to walk the streets with Yesenia using interactive 360 video and voice narration. Small details in the environment are highlighted and when clicked give Yesenia’s concerns and viewpoints on these aspects of her neighborhood. For instance, Yesenia points out footprints on the sidewalk that indicate safe harbor routes for children to walk to school and find guards on each corner. She also points out the numerous coffee shops, restaurants, and grocery stores that just aren’t affordable to her. But rather than a lament, the mobile app exposes audiences to this highly debated topic of how to connect affordable housing to the surrounding neighborhood. This topic then leads us into the eight decade saga of how San Francisco and many other American cities have tried to do this over the past eight decades.
The app will provide in depth statistics on the historic trends and issues facing affordable housing.

The mobile website also offers an opportunity to go deeper into the national and local statistics for affordable housing. Audiences can examine trends over time and dig into the nuances of more complex issues. For instance, through the work of the Mayor's Office of Housing and nonprofit groups such as The Eviction Mapping Project, stats are emerging on the impact market rate construction has on overall affordable units. While large-scale residential construction more affordable units to a neighborhood via inclusionary units, the increase in land value also prompts nearby home owners to flip their houses and kick out rent controlled residents. Such tradeoffs will be measured and compared in the web stories told.

Overall, the web version of MoHC emphasizes each character's motivations and life circumstances that led them to affordable housing. It will also add more quantitative data and archival materials to support the humanities themes raised in the walking version. From past audience feedback, we are confident that audiences want such and “off site” version of the content and that it will entice them to visit the character's neighborhoods and take the walking tours. And visa versa, we have seen from audience studies that many walkers want subsequent information on the characters and issues after they take the walks. Thus we envision a nice interplay between the web and app versions of MoHC.
Walking Cinema’s technical platform has been evolving over the past ten years and was funded in part by an NEH Digital Humanities Startup Grant in 2008.

Much of the core system developed to date will be used in this project. The system is based on Unity and thus easily extends to Android and iOS app production.

Elements of a tour project include a map, path, stopping points, and media that loads for each stop (text, video, audio, etc.) This tour information is stored in a simple XML-based CMS that can be changed on the fly. So updating an audio file, adding a stop, or revising text can be done without resubmission to the app stores.

The UI can be easily re-skinned for a new tour with the underlying data structure remaining the same. The XML data structure also understands the concept of multiple tours in one app, so adding more tours means merely adding a new section to the XML and assigning it points, paths, and media.

The system has also been optimized for quick download from the app store and then opportunistically downloads media files for the project in the background when the app is open and there is a data connection.
Our platform also has integrated Augmented Reality, allowing users to take photos that mix overlays and the image from the camera. This is a start towards the AR we plan to incorporate into MoHC. We will have to adjust the functionality so that not only stills can be placed on top of the camera view, but also animations and video. Finally, we have to link this AR to the mobile device’s compass so that the AR tracks where the user is pointing the camera and adjusts the overlay accordingly. For instance, if we want to show the interior of an SRO building, the AR layer will have to adjust according to phone angle and direction the camera is facing. This is work Max Antinori has already done via contractor work for museum projects, so we don’t expect this incremental development to be outside of the project scope.

As far as integrating the interactive maps from our partners at the Stanford Center for Spatial and Textual Analysis, we will investigate ways to integrate media into the app itself. If the files slow app performance or dramatically increase file size, we may look at putting that data on a webpage that is accessed within the app.

For the responsive website we will use a combination of 3rd party cloud based software such as Squarespace which has a fairly smooth, easily updateable parallax scrolling feature (see our project website that used parallax scrolling at www.seehidden.city.)

The project will not include any UGC and thus no need for monitoring content.
**SUSTAINABILITY PLAN**

The project team has built and maintained similar walkable media projects for the past 10 years. Our flexible, unity-based platform has ensured longevity even as end user devices evolve and app store requirements changes. For the *Walking Cinema: Murder on Beacon Hill* app we only had to update the app twice in the past eight years (once for iPad compatibility and once for a platform update.) The team’s *Walking Cinema: Posts from Gloucester* has only been updated once since its release four years ago (to incorporate Augmented Reality features.)

We foresee the prototype only being available for a limited time in the app stores (6 months) while we are doing our testing. So we don’t foresee the need to do more than minor bug fix afterupdate after initial posting to the stores. The project will handle its limited lifespan by information the users in the app store and in app that this beta release is only temporary and will be supported for only 6 months at which time we will remove the app from the app stores and make the web version available, but unsupported.

Any ongoing hosting costs for the website will be shouldered by Walking Cinema, which has been hosting project websites for 12 years and has no intention of ending its hosting plan for this project’s website.

The installations for the project will be maintained by the project team for the six month trial. After that, we will allow the hosting sites themselves to decide if they want to keep and maintain the exhibits. In the past eight years only one out 4 sites hosting installations for Murder on Beacon Hill have had to discontinue their hosting.