

## Defining, Measuring, and Comparing Place-Based Public Investment Outcomes

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## Abstract

This paper develops a methodology for defining and measuring economic, social and cultural returns to site-specific public investments at the local rather than metro or regional level. Artistic investments in particular have been held to higher standards than most place-based intervention and thus make a good case study for examining a generalized methodology. The paper applies the methods to two types of space—artist centers and live-work buildings. We first articulate the multiple impacts of large, new single structures on artists, neighborhoods, and the surrounding culture and economy. We then identify quantitative and qualitative methods developed through our ongoing research on live-work buildings. Throughout, we illustrate the use of methods and potential findings with examples from a recent Minnesota case study of 22 artist centers that span inner city, suburban and small town locations. Researchers, planners, and policymakers can adapt the mixed methods approach to evaluate the impact of single site interventions, large and small, on economic, community and sectoral (e.g. the arts) development. The methodology is useful both for anticipating the range of likely impacts of future projects and for evaluating completed projects against prior expectations.

## I. INTRODUCTION

Over the past two decades, local economic development has become preoccupied with attempts to attract outside capital to locate in regions and neighborhood, using subsidies that endanger the public sector's ability to provide services on into the future. Economists view this "race to the bottom" as a violation of efficient public finance and service provision, resulting in overall welfare losses (Markusen, 2007). In contrast, endogenous investment strategies seek to develop human and physical capital and viable businesses that will provide jobs, stability, equity and environmental sustainability well into the future. Sometimes referred to as "race to the top" initiatives, such strategies do not actually involve a race against other communities or neighborhoods but focus on existing strengths, innovative capacity and realistic expectations of the local economy or neighborhood's role in a larger geography. The hope is that every place can pursue this type of development strategy--the achievements of each locality will enhance overall welfare gains for all.

One challenge that advocates of endogenous investments face is the demand on the part of politicians and financial institutions that they demonstrate the promised results in terms of jobs, earnings, property values, tax revenues, local business incomes and various quality of life features. Cost-benefit analysis is often used for larger policy interventions and where it is fairly straightforward to test whether, for instance, an ethanol subsidy has induced greater production and what the cost to a state's taxpayers has been, both via the public purse and the gas tank. However, in local economic and community development, the consequences of physical land and infrastructure

investments are often multiple and also difficult to cordon off spatially. In addition, other causal forces in the environment may be shaping the outcomes at issue.

We explore this challenge at the micro-level, asking how a single site-specific intervention such as a large new or rehabilitated building affects the incomes and well-being of those with a direct stake in that building (be they residents, workers, owners, users, or consumers), those living and operating businesses nearby, and those affected by either the nature of the activity that takes place there or the overall economic impacts of the building's activities. We acknowledge the challenge of multiple stakeholders with diverse expectations and goals, also explored in our recent work (Markusen and Gadwa, 2010) and in the social science evaluation literature as a whole (e.g. Wells, 1981). To conduct an adequate assessment, we argue that researchers must use a mix of methods--some quantitative (using both secondary and primary data), some qualitative (interviews, key informant views, photographs). To underscore that researchers must take into account the specificity of goals and character in actual interventions (i.e. a new school has a completely different function from a new performing arts center), we use two case studies drawn from our work on artist-centric space: artists' centers and artist live-work buildings.

Local governments make brick and mortar arts infrastructure investments to create and enhance human, social, and cultural capital, create jobs and amplify fiscal capacity. In each instance, public sector managers, politicians and citizens have expectations about the outcomes. These will vary given the particular type of investment. When initiating an impact assessment, then, either before or after the fact, researchers must make explicit the social, physical, and economic benefits that proponents expect and

at what scale (individual, neighborhood, and/or regional). Often, there will be several, even competing, expectations. We demonstrate this first step in our methodology by articulating the views of four groups/scales of participants for our two cases: arts users and occupants, the larger arts community, neighborhood residents and businesses, and an entire regional economy.

So at the outset, the research strategy must be tailored to the particular use value of the building or site developed. One advantage of using these particular case studies is that arts and cultural investments are usually held to higher performance standards than many other investments (e.g. street improvements, subsidized housing, and sports stadiums) where advocates do not generally have to provide such evidence. Our methodology, however, will be useful for many researchers and groups wishing to evaluate local single-site interventions.

In the next section, we set these two cases in context and articulate the types of outcomes that advocates and producers of artist-centric space anticipate in advance. We then review researchers' and advocates' past attempts to evaluate the economic impacts of artistic space on cities and neighborhoods. We conclude that typical impact assessments often done for large arts facilities are not appropriate for artist centers or live-work spaces. We also refer to evaluation techniques outside of the cultural arena, such as those employed by housing and urban planning researchers.

Following that, we explore mixed methods for answering the various questions at the four scales. These include artist surveys, income sampling, interviews, focus groups, hedonic property valuation, fiscal (tax) impact analysis and comparative neighborhood versus parent area trend-lines. Although we are midstream in implementing this

methodology for the case of live-work projects, we refer to studies of our own and others on artist-centric spaces that have generated qualitative and quantitative results. In closing, we return to the question of why such evaluations matter and how they can be broadly implemented.

## II. DEFINITION, EVOLUTION AND USES OF ARTIST-CENTRIC SPACES

An artists' center is a service venues where artists convene to show and share their work, give and receive feedback, teach and learn, ponder artistic and professional challenges, share workspace and equipment, and exhibit their work. Two features distinguish artists' centers from other artist-serving organizations and training institutions: 1) a dedicated space for gatherings, shared equipment, personal or group work areas, exhibitions and performances; and 2) an open door, in the sense that anyone who expresses an interest may become a member, have access to events and services at an affordable price, and apply for merit-based mentorships, funding, and exhibitions. Services either are offered on a modest fee or first-come, first-served basis, or are competitively available on the basis of merit or need.

Artist live-work spaces provide artists with residential and studio workspace under one roof. These spaces often repurpose existing vacant buildings whose prior uses can range from industrial to retail. Live-work spaces can serve a wide range of artists including writers, visual and performing artists and are frequently mixed-use, blending the artist residence/studio space with nonresidential commercial space that can be occupied with for-profit or nonprofit tenants.

A range of factors have influenced the emergence and evolution of artist centers and live-work space: inner city challenges, artists' unique entrepreneurial and space needs, changing social norms, and new theories of economic competitiveness in a post-industrial economy. Federal tax policy reforms—the establishment of charitable income tax deductions and 501c3 nonprofit charitable organizations (1917, 1954) and tax credits for affordable housing (1986) and historic preservation (1976)—are the most significant federal public policy changes affecting artist space (Arnsberger *et al.* 2007, 39; Cummings and DiPasquale 1999, 251-307; Day 2005, 1). Through reductions in tax burdens, these policy innovations created market incentives to support arts organizations, subsidize arts facilities, and fund artists' projects. The non-profit option also created an organizational format for small groups of artists to develop dedicated spaces or “artists' centers” (Markusen and Johnson, 2006), focused on an artistic discipline or spatial community, for learning, space and equipment-sharing, mentoring, presentation and exhibition of work, and funding.

Artists have unusual space requirements, in that they have high rates of self-employment and require considerable work, rehearsal, and storage space. As older inner cities were abandoned by manufacturers for suburban single-floor plants, many artists invested “sweat equity” into rehabilitating and living in older industrial buildings. Starting in the 1960s, the rise of counterculture and ascent of America's first “art-stars,” i.e., Warhol, etc., repositioned artists and their live-work spaces as desirable urban land uses (Zukin 1982). Government officials and real estate and banking interests gradually embraced artist live-work spaces as an efficient and socially desirable way to deal with

under-utilized industrial buildings in inner-city neighborhoods and to attract back middle-class residents.

With Los Angeles's precocious study, *The Arts in the Economic Life of the City* (Perloff et al, 1979), the advent of the European creative city movement (Bianchini et al, 1988; Landry et al, 1996) and Richard Florida's *The Rise of the Creative Class* (2002), policy makers and their constituents increasingly turned to the arts as a route to regional economic competitiveness and urban revitalization. Physical infrastructure for the arts has diversified away from the dualism of large publicly-subsidized investments in performing arts spaces and museums versus individual artists or small groups independently acquiring space in which to create and share their work. Today, municipalities, developers, funders, patrons, and artists frequently pursue diversified arts and cultural agendas that include artist live-work spaces, artist centers, and smaller scale production and presentation spaces as community and economic development strategies.

Most such spaces encompass mixes of artistic production and arts consumption. Our two cases lean towards the artistic production end of a spectrum, with live-work buildings offering few opportunities for consumption (though many have galleries and open up for art crawls one or more times per year). Artists' centers often host gatherings in which arts production and consumption occur simultaneously, and also support exhibits and juried gift shops that are consumption-oriented. In contrast, museums and movies theatres are almost entirely arts consumption spaces, while live theatre and music spaces fuse production with consumption.

Proponents for artist-centered spaces, including artists, developers, funders, and municipalities, expect artist spaces to benefit arts users and occupants, the surrounding

neighborhood, and the larger region. However, as in many other areas of economic and community development, neither proponents nor researchers have adequately demonstrated the degree to which expected benefits are realized. How does an artist space benefit artists and arts groups occupying or using the facility? Does it increase the amount of time artists devote to art making? Can it enhance the sharing (and thus affordability) of equipment and the development of collaborations that improve artistic quality and increase income? Attract and retain more artists in the community or region?

What are the impacts on the surrounding neighborhood? Does an artist space contribute to new business formation or the emergence of “creative clusters”? Does a development help increase or stabilize property values without displacement? Is a project associated with reductions in crime, emergence of new community gathering places, or increased diversity of income, race or educational status? Can a development be linked to physical upgrades in the surrounding neighborhood or reduced vacancies? Does a development enliven the larger city and region, bringing citizens into the area as visitors, arts patrons or consumers?

### III. PRIOR RESEARCH ON PLACE-BASED SPACE IMPACTS

At the outset of our project, we turned to extant literatures in local economic and community development to see how other researchers had assessed place-based impacts. We expected to find that in areas like housing, infrastructure and recreational investments, tools would be well-developed. We were stunned to find that with few exceptions, this is not the case. We had to assemble our tool-kit from diverse methodologies and a few pioneering case studies.

In the case of cultural place-based investments, the role that artist spaces play in catalyzing neighborhood change is firmly embedded in the popular imagination (Zukin 1982; Lloyd and Clark 2001, 357-378). Artists or arts organizations move in, they spruce up the neighborhood making it desirable, and other members of the middle class flock to the area. Such cachet and population influx causes residential property values to rise and new businesses to open. Gentrification and displacement (both of other populations by artists, and eventually of artists themselves) are assumed to accompany this process. Unfortunately, research efforts to date have made only modest progress in testing this causal model. Evidence from Philadelphia suggests that population displacement does not accompany population and housing price increases in culturally rich neighborhoods (Stern 2002). Researchers have yet to undertake comparable analyses in hot real estate markets, such as in New York City and San Francisco. Others have articulated what the expected benefits of artist spaces may generally be and hypothesizing why they may occur (Jackson and Kabwasa-Green 2007; Markusen and Johnson 2006). For example, Elizabeth Strom posits that artists' unique class position as a group that is financially "poor" but culturally "rich" allows them to play a special role as change agents in cities (Strom 2008).

These efforts notwithstanding, few researchers have examined the impacts of artist-centric spaces. Two large-scale studies have attempted to evaluate and quantify the economic and social impacts of specific artistic spaces on their surrounding communities. A joint study produced by Artscape and Ryerson University (Canada) assessed small-scale community and economic impacts of three cultural facilities (one theater and two live-work spaces) in Toronto and Vancouver (Jones et al. 2003). Stephen Sheppard

evaluated the social and economic impacts of the Mass MoCA museum in North Adams, MA (Sheppard et al. 2006; Sheppard, Benjamin, and Dworkin 2007). Other studies have assessed the social benefits of art programs (Matarasso 1997) and examined how culturally rich neighborhoods are associated with social and economic advantages, although these studies are not rooted in a site-specific spatial intervention (Stern 2002).

Currently, researchers and advocates most frequently rely on economic impact analysis to assess the contributions of the arts and cultural sector. Rooted in export base theory, which assumes that local economic growth is driven by the export (non-local) sector, these models estimate the impact of an industry or particular business with significant employment on the local economy. Researchers and advocacy groups use economic impact models to tally up sector-specific direct, indirect and induced economic activity triggered by nonprofit arts and cultural organizations (Sheppard et al. 2006; Americans for the Arts 2003; Beyers and GMA Research Corporation 2004; Scanlon and Lainer 2006; Audience Research & Analysis 2006).

However, critics claim arts economic impact studies are methodologically flawed. Most arts impact studies are confined to non-profit arts organizations and thus do not count the earnings of self-employment artists, many of whom export their work out of the region, nor the sizeable cultural industries or community arts activities that are not organized as non-profits. Often researchers do not adequately demonstrate that arts expenditures constitutes basic (or export) activity-- they ignore the substitution effect, treating all spending as “new” spending, as opposed to factoring out expenditures that would have been spent elsewhere in the local economy (Sterngold 2004, 166-187; Seaman 2000, 266-285). They often treat travel spending of arts patrons from outside the

region as “export income,” when many tourists visit due to business trips or family visits. Such studies also ignore the fact that much of the money in the arts comes from government, through NEA and State Arts Board funding, local government commitments, and the generous tax exemption for philanthropy.

In another line of reasoning, advocates of a consumption base alternative critique the preoccupation with export orientation. They argue that increasing a sector’s ability to capture local discretionary income provides a route to sustainable job and income generation. In the arts, for instance, a city or community’s investments in arts and cultural space may provide a local outlet for patronage and spending that would otherwise have leaked out of the region (Markusen, 2007; Markusen and Schrock, 2009). The current emphasis on “staycations” is an applied example of this phenomenon.

Qualities of many types of site-specific investments, like artist centers and live-work spaces, make them particularly ill-suited for economic impact modeling. First, most artists and arts groups occupying live-work spaces or joining artists’ centers are micro-enterprises with few or no additional employees. Even if researchers include non-arts commercial tenants, outcomes as measured by economic impact models are likely to be extremely modest and very difficult to disentangle from other causal factors. Second, economic impact models emphasize non-local dollars (the export base). Unlike a museum or theater claiming sizable outside patronage, the majority of artistic production occurring in artist centers and live-work spaces is likely not exported or bought by tourists, though some indeed will be. Third, when researchers conduct economic impact modeling with rigor, they exclude expenditures that are not net new spending. Researchers must thus restrict the analysis to artists/enterprises that relocated from

outside the area and to the marginal improvements attributable to relocation to or use of the building. The results would be even more modest.

In any case, macro economic impacts can only be reliably constructed with industry trade data at the state or county level. For most jurisdictions, economic impact models are not reliable below the county level. Researchers must instead evaluate outcomes by concentrating on social and economic changes at the neighborhood level and in the larger arts and cultural community. In general, city and non-profit interest in these types of spaces are not driven by macro-economic prospects so much as revitalization of specific neighborhoods and a desire to develop the human capital of artists, who in turn may enhance the performance of cultural and non-cultural industries (Markusen and King, 2003).

Researchers and practitioners experience the paucity of evaluation techniques with place-based economic development initiatives in general. Economic developers adopt a “shoot anything that flies, claim anything that falls” approach, settling for enumerating change and ascribing causality, albeit on shaky footing (Rubin 2001, 27-31-47). Part of the challenge lies in the difficulty of the undertaking. Spatial interventions occur in dynamic communities, in which it is impossible to approximate a controlled, laboratory situation to conclusively determine the influence of a single intervention (Bartik and Bingham 1997, 246).

Researchers evaluating neighborhood impacts of housing developments also face these challenges. The majority of housing impact studies focus on one metric: changes to surrounding residential property values (Ellen and Voicu 2006, 31-52; Ding and Knaap 2003, 701-728). The best of these studies employ hedonic property valuation, which we

recommend, controlling for variation with a regression model. In the case of subsidized housing, researchers have expanded the scope of inquiry to include crime rates, racial transition and poverty concentration, although none consider as broad a range of impacts as we address here (Freeman and Botein 2002, 359-378).

Furthermore, researchers cannot readily adapt fiscal impact analysis or quasi-experimental method approaches used in other disciplines. Urban planning's fiscal impact analyses are used to forecast a potential development's future public costs and revenues, not to evaluate post-development impacts. They also fail to capture private economic, social or physical impacts (Kotval and Mullin 2005). The quasi-experimental method, used successfully to quantify the impact of an interstate freeway exchange or arms manufacturing plant on a small town and or rural community is inappropriate for urban environments with so many moving parts. Isserman's pathbreaking quasi-experimental impact studies, for instance, have all involved small rural towns or counties (Isserman et al, 1989; Isserman and Sternberg, 1994; Isserman and Rephann, 1995).

#### IV. IMPACT ASSESSMENT DESIGN

Researchers can evaluate place-based building interventions along several impact axes: impacts on individuals and organizations housed-in or using the facility; impacts on the larger community of interest (e.g. artists and art lovers in our case); and economic, social and physical impacts at the neighborhood, city and region scales. To address each axis, we advocate a hybrid approach incorporating quantitative and qualitative methods. Researchers can conduct studies on comparable sets of interventions to determine how variations in scale, use, setting, and financing structures contribute to a project's

impact—for example, the 22 artist centers in Minnesota studied and compared in Markusen and Johnson (2006) and Artspace Projects' 17 live-work and studio buildings completed and operating for at least several years around the country, enumerated in Gadwa (2009). In this section, we pursue arts-related impacts, economic impacts, physical impacts and social impacts, in that order, ending with a discussion of caution regarding causality. Readers interested in other types of place-based investments can explore analogies and differences in tailoring these methods to their research subjects.

### **Arts-related Impacts**

To determine the impacts of a space on those individuals and groups using or occupying the facility, researchers should develop and address questions tailored to the type of space of interest. For instance, for artist-centric spaces: Do artists/arts organizations perceive a space as appropriate to their needs? Do artists/arts organizations perceive the given space as affordable? Do artists/arts organizations engage in collaborations and/or networking that would not otherwise occur? Are artists/arts organizations able to better share equipment and/or resources? Are they able to increase the amount of time devoted to making artwork or productivity? Increase their assets? Their overall income and/or the percentage of income earned from their artwork? Are they able to attain greater recognition/prominence within their field? Do artists perceive that living, working or gathering in an artist space helps validate identity? Are arts organizations able to financially stabilize or grow?

Researchers can use on-line surveys to answer these questions. Recent research demonstrates that web-based surveys can be successful in eliciting responses from artists

and are cost-effective (Markusen, Gadwa and Shifferd, 2008; Markusen et al, 2006).

Although this technique will not conclusively prove that an artist space alone caused changes experienced by artists and arts organizations, researchers can capture impacts by asking survey takers to assess the development's influence. Researchers might attempt to expand the survey to a comparison group of artists and arts organizations to increase its validity, but identifying appropriate subjects, soliciting participation and controlling for variations in career stages, organizational missions, and others characteristics present formidable logistical challenges and substantially increases cost.

In an example, a 2005 web-based survey of the Minneapolis-based Loft Literary Center's members, students and award winners yielded quantitative data on the numbers of artists who enhanced their careers and reputation, and of amateurs and would-be writers who have taken important first steps, as a result of Loft services and engagement (Markusen and Johnson, 2006: 36-7 and endnote 5). Of 25% of a universe of 5650 responding, 84% agreed that "participation in the Loft classes enhanced my sense of being part of a writing community," an impact largely attributed to the Loft' encouraging their writing practice and furthering the quality of their work rather than in increasing their publication rate or ability to earn income through writing. Loft course offerings were highly rated, with large majorities responding that their motivation for taking classes was to improve their writing skills (86%), personal enrichment (81%), improve creativity (63%), and be exposed to expert writers (63%). Many fewer took classes to become published (39%), to increase writing income (13%), or increase the prospects of receiving awards or grants (5%). Following their coursework, 61% made artistic connections with individuals or communities, 64% developed writing friends and

colleagues, and 30% formed a writing group. Professional writers--recipients of Loft mentorships and career initiative grants and fellowships--reported that the Loft tangibly contributed to career advancement. Of sixty-eight responding writers who were mentored between 1981 and 2005, 41% published their work as a result and 39% received other writing grants and awards. Recipients of Loft career fellowships presented and promoted their work to new audiences (67%), received greater recognition as a writer (85%), were invited to give more public readings (63%), and increased book sales (27%).

To augment survey findings, researchers can tour a space and solicit narrative accounts of how artists and arts groups experience it through focus groups and interviews. Focus groups paint a collective portrait of how a space affects arts occupants and users, and interviews offer researchers an opportunity to elicit detailed information. When touring a space, researchers can photograph relevant features, as visual images can convey spatial details and experience, providing data of a different kind.

### *Artists' Income*

To examine how an artist space affects artists' and arts organizations' incomes, researchers can augment survey responses by analyzing changes in income over time where data are available. For instance, in live-work buildings financed with affordable low-income housing tax credits, tenants annually submit detailed information on their income to the building's property managers. In addition, arts nonprofit organizations annually file Form 990, a tax return with the IRS, detailing annual revenues and expenditures. Because these are nonprofit organizations, their tax returns are in the public domain. Researchers can estimate changes in income experienced by artists and arts

organizations over time through representative (preferably random) sampling, while stripping records of identifying information to comply with human subjects protocols. For membership organizations with considerable turnover, like artists' centers, income enhancement information beyond surveys is not plausible.

### *Larger Artistic Community*

Proponents often expect an artist space to influence not only artists and arts organizations housed-in or directly using the space, but also the larger arts community. To assess this impact, researchers can investigate the following. Does an artist-centric building serve as a hub for art events open to the public? Is an artist space a gathering place for the larger arts community? Can artistic innovations, movements or trends be traced to the building? Are artists drawn to the region, or anchored there, as a result of the building's presence? Does the artist-centric space complement other arts spaces in the immediate neighborhood and if so, how can their individual and joint effects be distinguished?

To best determine the answers to these questions, researchers can include relevant response sections in an artist survey and augment these results with interviews with key informants, such as organizers of area-wide arts crawls and/or festivals, local building managers, local arts critics and funders.

## **Economic Impacts**

Whether and how an artist-centered space contributes to economic activity and investment in the surrounding neighborhood and larger region critically concerns neighboring business owners and residents, developers, and government officials. Because few artists and arts organizations housed-in or using an artist center or live-work space become major employers, researchers must look beyond standard economic impact models to assess the more nuanced economic role these facilities play. Key questions include: Has an artist space increased tourism and/or cultural events? Is an artist space associated with businesses opening or expanding in the neighborhood? Is an artist space associated with increases to neighborhood employment levels? Is an artist space associated with a positive change in the surrounding neighborhood's mix of industries and/or businesses (i.e. more creative clusters)? Has an artist space increased or stabilized the surrounding neighborhood's property values and without displacement? Has an artist space increased a community's tax revenues?

As detailed below, researchers can employ a variety of techniques to answer these questions including fieldwork, comparative neighborhood vs. parent area trend-lines, hedonic property valuation, fiscal (tax) impact analysis, and tenant surveys. Since available data sources do not span all years or extend to all geographic levels, researchers must implement techniques practically for their specific needs and augment gaps with alternate data sources where possible.

### *Tourism/Business Expansion*

Fieldwork techniques are a key tool to help researchers determine whether the artist space is associated with increased tourism or cultural events and/or new or expanded area businesses. Informant interviews can reveal whether an artist space serves as a hub for events and reflect a space's economic significance in terms of increased tourism. To determine whether an artist space is associated with new or expanded neighborhood businesses, researchers can interview representatives of neighborhood associations, neighborhood business associations or chambers of commerce with knowledge of the changing business environment and any causal linkages to the artist space they perceive. In the Minnesota Artists' Centers study cited above, a fair number of such centers generated new commercial district activity. This was easiest to detect in the case of small, rural towns where revitalization could not easily be attributed to other causes. The city-subsidized creation of New York Mills Regional Cultural Center, for instance, reversed decline in its old downtown and prompted new private investment in new and retail businesses that serve patrons from the surrounding rural region drawn to the Center (Markusen and Johnson, 2006: 91-94). Similar investments in the Northfield Arts Guild's new downtown quarters, a vacant building, revitalized that town's commercial heart and is credited with attracting new residents as well (Ibid: 94-8).

Researchers can supplement interview findings on area businesses formation and expansion with annual data from the U.S. Census Bureau's County and Zip Code Business Patterns, when data availability permits. Researchers can use comparative techniques, such developing trend-lines on the number of business establishments for the neighborhood and a larger parent area both prior to and after an artist space development.

Detectible shifts following the start-up of an artist space provide researchers with empirical evidence to augment interview findings. A parent area trend-line can expose patterns due to larger economic pressures. We advocate using neighborhood vs. parent area trend-lines for many other analyses, presented subsequently. However, this approach will not conclusively demonstrate causal relationships between the artist space intervention and changing socio-economic indicators. When a slightly larger parent area functions as the comparison region, changes detected at the neighborhood level can also influence the larger region (spatial auto-correlation). But, selecting alternate neighborhoods for matched-pair comparisons in dynamic urban settings is nearly impossible.

#### *Employment/Mix of Industries*

To document whether an artist space development coincides with increases to employment or changes in industry composition in the surrounding neighborhood, researchers can again develop comparative trend-lines for the neighborhood and larger parent area using County and Zip Code Business Pattern data. By tracking annual changes in employment, gross payroll and industry composition at the zip code and county level, we can observe whether the neighborhood experiences growth in jobs, salary levels or creative industrial clusters subsequent to the artist space development and relative to the parent area.

Unfortunately, County and Zip Code Business Patterns data are not without limitations. Researchers must rely on zip code level data, rather than Census tract, to estimate neighborhood effects. Furthermore, the Census Bureau only started collecting

zip code level data after 1995 and in 1998 they adopted a new industrial classification system (NAICS), complicating comparisons over time. Given these restrictions, researchers will find projects completed after 2000 best suited to this analysis. Additional shortcomings include data suppression to protect privacy, occasional misclassifications of businesses by industry, and the absence of information on sales/profits and self-employment. Significant to this research, the failure to track self-employment will result in an under-count of working artists and designers who engage in self-employment at higher rates than the general population (Markusen and King 2003, 28). Despite the limitations, County and Zip Code Business Patterns data are the best available source for gauging an artist space's contributions to neighborhood employment, business formation and expansion, and change in industrial mix.

### *Property Values*

The impact of artist space on property value matters to elected officials and neighboring residents. Often city officials specifically seek increases to property values to increase their community's tax base. Neighboring residents may welcome increased personal equity and investment to their community or conversely fear increasing tax burdens or involuntary displacement. To address the question of whether an artist space increased or stabilized the surrounding neighborhood's property values and by how much, researchers can use the hedonic property valuation method. Researchers can also scan for any related population displacement through an analysis, presented subsequently.

Many factors contribute to changes in property value, which complicates determining the impact of a single intervention. The hedonic method of property

valuation uses a statistical process (multivariate regression analysis) to tease out how much change can be attributed to an artist space versus other factors such as characteristics of the property, overall ups and downs in the housing market, and spatial effects. With this technique, researchers control for market variations by analyzing sale price data at the individual parcel level for a number of years prior to and after the artist space development. By collecting data for a large comparative parent area researchers also introduce spatial control. By spatially mapping property value impact, researchers can clearly convey results. Stephen Sheppard successfully used this technique to evaluate Mass MoCA's effect on the property values of North Adam's MA and also in his related work on 16 museums across the country (Sheppard, et al, 2006; Sheppard 2008b).

Researchers face challenges in using the hedonic method. It requires a minimum of two years of post-development data. In addition, commercial properties turn over far less frequently than residential properties, so this technique cannot be used for an analysis of commercial properties. The researchers must obtain the parcel-level data from individual municipalities (usually from the County Assessor's office). Although the data should be available as part of the public record, municipalities may not have them available electronically and vary in cooperativeness and administrative fees charged. Finally, this technique is highly technical and requires specific skills (Sheppard 2008a).

### *Gentrification/Population Displacement*

To test whether any artist space-catalyzed increases to residential property values came at the expense of population displacement, researchers can use comparative neighborhood vs. parent area trend-lines from Census data to track changes in

neighborhood racial composition, rental rates and the percentage of the population that moved in the last five years. Unfortunately, data points are limited to ten-year intervals and only currently extend through 2000.

Researchers can also probe community informants on their impressions of whether the neighborhood experienced population displacement associated with gentrification and whether they view the artist space as a contributing influence. Long-time residents or business owners, community activists such as neighborhood organization employees and government officials can augment quantitative findings with their own first-hand impressions of changing neighborhood population dynamics.

### *Fiscal (Tax) Impacts*

Artist spaces may both receive tax benefits and generate tax revenue increases. Developers may finance artist spaces with historical preservation and low income housing tax credits and other public sources. Many projects re-purpose vacant buildings that have been off the local tax rolls. The owners of an artist space may pay property taxes, although municipalities vary in their treatment of nonprofit owners. (Some have property tax exemptions for nonprofits, while others require payments in lieu of taxes). If an artist space triggers increases to property values in the vicinity, those increments would also add to the tax base. An artist space may also stimulate sales tax revenues if it draws customers and tourists to the area, though again, researchers can attempt to determine if these have simply shifted in locale within the larger jurisdiction.

Researchers can attempt to estimate the net fiscal impact of the artist space through a variety of techniques. By interviewing the developer of an artist space,

researchers can establish public sources used to finance the project. To estimate an artist space's property tax impacts, researchers can combine net tax increments paid on the space with the taxes earned from any artist space-triggered increases to surrounding property values as calculated through the hedonic method. (Again, these increments should be adjusted for city-wide property value appreciation and tax hikes). To examine sales tax impacts, researcher may compare historical trend lines for a neighborhood and parent region, if data are available. Municipalities collect sales tax information but may not keep data at low levels of geography and may not provide it electronically.

### *Artist In-Migration*

To examine the question of whether an artist space triggered the in-migration of out-of-town artists, researchers can rely on survey and interview responses. Through a survey, artists using or living in an artist space can indicate whether they relocated, from where, and whether the artist space factored in their decision. Through informant interviews, residents and neighborhood organizations staff members can offer first hand accounts of changing neighborhood dynamics. Unfortunately, no other data sources yield information that quantify whether an artist space attracts other artists who dwell or work outside the building studied. A novel use of artists' net migration patterns with other Census data on artists was used in the mid-1990s to draw tentative inferences on the importance of local investments, including artists' centers and live-work buildings, in "home-growing" the Minneapolis/St. Paul (MSP) metro area artistic labor force in the 1990s (Markusen and Schrock, 2006). They used the Census 5% Public Use Micro-data Sample (PUMS) on the changing totals of professional artists (those reporting art work as

their primary occupation) between 1990 and 2000 and found the expansion in MSP artists' ranks had outpaced national growth rates and those of many other arts-rich metros (including Seattle, New York, Boston, Chicago). The researchers also noted that the MSP metro experienced a slight out-migration of artists in the period 1995-2000, the only interval for which migration origins and destinations are asked in the Census (Ibid., Tables, 3, 4). They inferred, tentatively because of non-matching time periods, that robust growth in the ranks of MSP artists, since they could not be attributed to net in-migration, was likely due to larger and more effective local investments in infrastructure and programming for artists from diverse sources. Since the MSP area hosts more artists' centers than any other metro of any size and a concentration of live-work buildings bested probably only by Boston, it is likely that these investments account for at least some of the region's superior growth in artists' ranks. In contrast, a survey of artists in San Jose metro, a region where artists are under-represented in the workforce, found very high levels of unmet need for work, live-work and convening space (Markusen, Gadwa and Shifferd, 2008).

However, patterns detectible at the city or metropolitan area level cannot reasonably be attributed to an individual or even an aggregation of new and expended artistic space. Other contributing factors include funding levels by public and non-profit foundations, the vigor of area cultural industries, and the size and quality of artistic training institutions. Unfortunately, and more germane to the current discussion, PUMS data are not statistically reliable at the neighborhood level. However, migration data from surveys of live-work residents and artists' centers members will offer independent and more closely targeted evidence on relocation effects.

## **Physical Impacts**

An artist space development changes the immediate site it occupies and may also catalyze physical impacts in the surrounding neighborhoods. Government officials and neighboring residents and business owners all have a stake in these outcomes; physical investments have economic and social impacts, including reductions in crime and increased perceptions of safety. The key questions researchers should address are:

- Did an artist space development incorporate historic preservation or repurpose an existing vacant building or brownfield site?
- Has an artist space catalyzed development or redevelopment of other properties or upgrading of public spaces?
- Is an artist space associated with decreased vacancies?
- Is an artist space associated with increased property maintenance?
- Has an artist space catalyzed an expansion of services offered in the neighborhood?
- Has an artist space contributed to increased pedestrian activity?

Researchers can draw on mixed methods to answer the questions listed above. By interviewing the developer of an artist space, researchers can establish whether the project incorporated historic preservation or repurposed an existing vacant building or brownfield site. To address broader physical impacts, researchers can rely on interviews with other informants, such as elected representatives, business owners, community activists, residents and critics of the space. Researchers can conduct a subset of interviews during neighborhood walking tours and photograph notable features.

Researchers can augment first-hand accounts by comparing trend-lines on related quantitative indicators for the neighborhood and parent area. Researchers can track changes in residential vacancy rates through Census data and use Home Mortgage Disclosure Act (HMDA) data on the volume and frequency of loans for home renovations as a proxy for physical investments. Both sources provide data at the Census tract level and above. Researchers may not be able to apply these data sources to all projects, given the Census's decennial release and that HMDA data, although released annually, is only available starting in 1997. Researchers may also use building permit data to address whether an artist space is associated with increased development or redevelopment of other properties or increased maintenance of private property. However, no national clearinghouse retains building permit data for low levels of geography. Individual municipalities may not keep data at low levels of geography or provide it electronically, making building permit data difficult to use for large comparative national studies.

## **Social Impacts**

An artist space's social impacts on the surrounding neighborhood matter to neighboring residents and business owners and all who are concerned about that community's well-being. To examine an artist space's social impacts on the surrounding neighborhood, researchers should take up the following questions:

- Is an artist space associated with increased social connectivity (public events/programs, new community gathering places, volunteerism, civic engagement) in the surrounding neighborhood?

- Has an artist space benefited youth development?
- Is an artist space associated with increased neighborhood diversity of income, race/ethnicity, and/or educational status?
- Is an artist space associated with increased rates of home-ownership?
- Is an artist space associated with decreased neighborhood crime and increased perceptions of safety?
- Is an artist space associated with increased confidence in or desirability of the neighborhood?
- Has an artist space increased the neighborhood's cache or buzz factor?

### *Social Connectivity*

Researchers can answer the question of whether an artist space increases social connectivity, as is measured by public events and new community gathering places, through artist focus groups and informant interviews. Although we have already presented research probes that establish a space's importance as a venue for arts events open to the public, significance to the larger arts community and/or tourism, rather than social connectivity, drives those inquiries. Given this shift in focus, researchers can interview neighborhood residents and community activists in addition to event producers, funders, art critics, and local business interests.

### *Civic Engagement, Volunteerism and Youth Development*

Researchers can address the questions of whether an artist space benefits civic engagement, volunteerism or youth development through both an artist survey and artist focus groups. Through the survey, researchers can generate statistics about the extent of artists' civic engagement, volunteerism and youth development activities, whether these efforts take place near the artist space, and whether artists increase these activities after beginning their involvement with the artist space. Through artist focus groups, researchers can obtain detailed narrative accounts of the kinds of civic activity, volunteerism and youth development occurring.

In their 2006 Artists' Centers study, Markusen and Johnson (2006) elicited a remarkable diverse range of responses from various Centers' managers, members and community leaders about these impacts. Three community-oriented Centers in Minneapolis (Juxtaposition Arts, Homewood Studios, and Intermedia Arts) have missions that prioritize the development of youth artistic capabilities and expression in their neighborhoods (see the case studies in the study cited). In each case, their programming and outcomes demonstrate success in engaging youth and raising the level of civic engagement within and outside of their dedicated spaces in their neighborhoods. Discipline-based artist centers, like the Loft Literary Center, the Playwrights' Center, Northern Clay Center, Minnesota Center for Photography and the Textile Center do not focus their programming on their neighborhoods and have little youth-oriented programming. In almost all cases, their locations were chosen on the basis of a suitable and affordable building, not connectivity with the neighborhoods (see profiles), and they seek to serve metropolitan constituencies rather than communities. One has since closed, despite its location in the Northeast Minneapolis official Arts District. Another suffered the

closure of a bookstore in its storefront, a result of paucity of street traffic in a neighborhood devoid of residential space affordable for artists and writers.

### *Occupancy Tenure/Diversity*

To determine whether an artist space is associated with increased rates of home-ownership and/or increased neighborhood diversity of income, race/ethnicity, and/or educational status, researchers can use Census data to develop trend lines on a range of metrics and compare changes for the neighborhood and parent area over time. Relevant variables include home ownership and rental rates, income distribution, unemployment and poverty levels, racial composition, and levels of educational attainment. Interviews with artists can also probe whether artists moved into a neighborhood when the outreach of a particular facility stressed its commitment to diversity, as was the case with several of the more community-oriented artist centers cited in the previous paragraph. Indeed, Homewood Studios only permits studio rentals by artists who live in the neighborhood as part of its effort to link local youth with positive role models. This requirement has encouraged several artists to relocate.

### *Safety*

To determine whether an artist space increases perceptions of neighborhood safety, researchers can interview community informants, such as neighborhood residents, community activists and local business owners. Researchers may also be able to access crime statistics from individual municipalities. However, the willingness of police

departments to release these data varies by jurisdiction and is often only available historically at city levels, making this crime statistics an impractical data source for large comparative national studies.

### *Neighborhood Confidence*

Researchers can use a combination of methods to determine whether an artist space is associated with increased neighborhood confidence or desirability. For artist spaces completed prior to 2000, researchers can use Census data to track changes in the neighborhood's population size and median (owner-occupied) home value against parent areas as an approximate measure of neighborhood desirability. For artist spaces completed after 2000, researchers can use HMDA data to track changes to the volume and frequency of loans for purchase of a home. Researchers can combine these techniques with interviews with elected officials and neighborhood residents and business owners to obtain narrative accounts of neighborhood change. Through these interviews researchers can determine the degree to which community members see an artist space as a driver of neighborhood change and assess whether an artist space increased the neighborhood's cache.

### *Causal Factors/Other Influences*

Where a comparative study is possible (as opposed to single site case studies), researchers can explore the relative impacts of various artist space developments. Circumstances such as the type of artist space development (live-work, nonresidential,

mixed-use, convening or presentation space), degree of community involvement/political receptivity, financing structure, zoning challenges, or external influences such as the pre-existing real-estate climate or economic stagnation/growth, are hypothesized causal influences for a project's success. They can be weighted across a set of cases, taking into account the unique circumstance surrounding each development and using interviews with government officials, community activists and local business owners to enumerate what other possible influences may have contributed to experienced neighborhood change. Through this culminating assessment, researchers can detect factors that contribute to an artist space's ability to positively benefit resident artists and arts groups and the surrounding neighborhood.

Following Zukin's path-breaking book on artists' loft development in Manhattan (1982), several researchers have sought to study, through intensive case studies, the revitalization of specific neighborhoods around new artistic and cultural activities and occupancy. For example, Lloyd's (2002) careful study of the Wicker Park neighborhood in Chicago highlights the roles of affordable housing space, cafes and music performance spaces, and nearby cultural industry employers as catalysts in the make-over of that neighborhood (and its eventual gentrification, pushing artists out). In general, there is a strong presumption in academic writing on these subjects that artists "cause" gentrification or are used by real estate developers as signifiers and sweat laborers in longer-term makeovers. However, few of these cases or analyses document before and after conditions and articulate all possible causal factors, especially difficult in a neighborhood that is embedded in a larger, complex city.

One careful empirical study looked carefully at artist-rich neighborhoods compared to those without arts and cultural nodes in Philadelphia concludes that the presence of artists enlivens community life, stabilizes crime rates and does not lead to longer term gentrification (Stern and Seifert, 1998). In a more recent paper that summarizes a series of their careful empirical on Philadelphia, Stern and Seifert (2007) argue that New York cannot be used to over-generalize about other cities and neighborhoods. Gentrification may be first and foremost a result of heavy competition for property and space, in turn a function of the area's macro-economic dynamics and institutional features of its property market. In other cities, the pace of small-scale redevelopment is generally slow and may enable positive coexistence of people from various races and classes and occupations, helping people accept diversity in poor neighborhoods. In such settings, arts and cultural institutions serve the local community but also encourage arts participation from outside the neighborhood, bringing needed bridging capital to poor communities that were struggling without the balance in social capital and relying solely on bonding capital. This may also be the case in small towns.

## V. CONCLUSIONS AND IMPLICATIONS

This paper presents a mixed methods approach to studying the impact of the addition of a medium to large-scale people-serving facility to a neighborhood, community of interest and city, i.e. buildings where dozens of residents, workers, visitors, managers and other users are likely to cross the most days of the week. The impacts of interest include economic, physical and social impacts, with multi-dimensional criteria for each posed. Many urban analysts and advocates desire such methodologies and their

findings as guides to good strategies for investing in alternative urban buildings and spaces. A generic research methodology appropriate for all possible buildings would lack specificity, so in our case, we show how particular concerns associated with the building's uses (in this case, artist-supporting) can be built into the research strategy. For instance, in the case of both artist live-work and center projects, we incorporate tools that attempt to chart the impact of the dedicated space on artists' incomes, time spent on art, and quality of their artwork, as well as impacts on the larger artistic labor force and industries that employ artists.

Since we have not yet completed our pilot use of this methodology on an appropriate sample, we cannot draw conclusions on the suitability of the methodology or individual portions of it. However, through illustrations from priori work we have shown how resorting to secondary data analysis (the Census PUMS), surveys of artists, and interviews with artists and space developers and managers can provide answers to questions of interest. While our methodology is labor-intensive and requires rather significant resources to implement, we believe that its output can make substantial contributions to urban economic development and revitalization efforts. To date, most cultural and other building projects are undertaken on a "we'll build it and we'll hope they will come" basis, with advocates painting a rosy picture for politicians and funders and opponents rattling a budgetary or special interest rhetorical sword. We believe that urban revitalization advocates will have a much stronger case if they can demonstrate palpable improvements in economic, physical and social outcomes from projects that are already built. We look forward to others contributing to this project.

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