Strategy 21: Public and Private Cooperation in 21st Century Pittsburgh

Introduction of Late 19th Century Pittsburgh and the Beginnings of Strategy 21

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The City of Pittsburgh and surrounding areas suffered great economic losses during the 1970's and 1980's. The historic base of the region's economy, industrial manufacturing, was the hardest hit sector. Many regionally-based manufacturers along with businesses in other sectors suffered lay-offs, reduced production, or bankruptcy. The damage to the region's economy had far-reaching negative impacts on other aspects of the region. Short-term business losses translated into increased unemployment, losses to the region's tax base, and decreased property values as part of a general regional depression.

It was under these conditions that local public and private individuals and organizations decided to work cooperatively to improve the Pittsburgh economy, and the region as a whole. The effort necessary to improve local conditions was a massive redevelopment strategy. The Pittsburgh region had benefitted from renaissance redevelopment strategies earlier in its history. The city's first redevelopment program was after World War II. Pursued by Mayor David Lawrence alongside local business leader R.K. Mellon and others, this first effort concentrated on improving urban conditions in Pittsburgh. With local industrial manufacturers experiencing great financial success, the first renaissance used prevalent public and private funding to solve regional issues of environmental pollution and urban blight, while turning downtown Pittsburgh into a modern business district.

A successive plan was adopted in the 1960's. Picking up where the first renaissance left off, this second round also intended to improve living conditions within the region. Whereas the first effort targeted improving sub-standard living conditions for local residents, this second renaissance strategy focused on developing city planning and culture. Parts of the 1960's redevelopment strategy included the construction of the Civic Arena, redevelopment of the Lower Hill District, and development of various Pittsburgh business districts like East Liberty. Both plans were carried out by local business and public leaders, and both targeted specific aspects of the region to improve.

Redevelopment of the region was not limited to these renaissance strategies up until the 1980's. Alongside large all-encompassing strategies, there were also many more localized initiatives. But most of the post-war efforts to improve the city of Pittsburgh were undone by the region's industrial decline during the 1970's and 1980's. Between 1970 and 1980, the Pittsburgh region lost around 50,000 manufacturing jobs. From 1980 through 1984, another 90,000 manufacturing jobs left the region. This job loss was especially debilitating because the city's population during 1980 was around 500,000 people. The regional unemployment average was 60% above the national average in 1984. Some municipalities and neighborhoods were hurt more than others, but the massive job loss resulted in a shrinking population, declining tax base, and a local work force and economy centered on industries that were no longer operating or were operating at a severely reduced capacity in the region[i].

The city of Pittsburgh and the surrounding region were left in a serious dilemma during the 1980's. The region needed to improve its economic condition and related social problems or risk greater collapse in the future. The historic use of public-private cooperation to improve local conditions was considered by leaders and city organizations.

Strategy 21 was the plan decided upon by various local interests to improve local conditions. The Strategy was intended to develop the local economy by reversing economic and societal trends resulting from the industrial decline of the previous decade and a half. This development would occur from the expansion and diversification of the local economy, develop local technology and research resources, and retrain the local workforce for upcoming modern industries. Improvement in these general fields would lead to job creation, increased tax revenues, and improved standard of living for residents[ii]. But how would these goals be met? Previous local redevelopment efforts were largely designed to improve specific local conditions: the construction of desired facilities and the destruction of undesired facilities. These plans were also carried out with a strong local government and with the financial support of business leaders. Economic conditions necessitating redevelopment also harmed the efficacy of local governments to tax and construct new facilities. Traditionally supportive local businesses were not left in position to fund redevelopment efforts, and what was necessary during the 1980's was not specific improvement, but overall regional redevelopment.

Thus, Strategy 21 was formulated based on previous traditions of public-private cooperation, but in a way that had not been pursued previously in Pittsburgh, or elsewhere. Unique goals of overall regional redevelopment would be met with unique strategies. Issues of funding, social equity, and historic preservation would be balanced with real world operating conditions. During the body of my paper I will show how local historical conditions influenced the formulation and execution of Strategy 21 in specific areas of the plan, and how those specific areas have developed over time or not to improve the city. This site-specific review of Strategy 21 initiatives will be followed by my conclusion of lessons learned from the execution of the Strategy over time. My belief from research of Strategy 21 is that local policy pursuant of local redevelopment should incorporate local resources and flexible planning. The planning should be facilitated by government organizations with the legal authority to promote redevelopment, while executed by private organizations with the resources and flexibility to make the execution most efficient, given the operating conditions.

Strategy 21: Before, During, and After Execution, 1985-2010

Strategy 21 was compiled by the public officials of Pittsburgh: Mayor Richard Caliguiri, and Allegheny County Commissioners Tom Foerster, Pete Flaherty, and Barbara Hafer. Private contributors were the University of Pittsburgh and Carnegie Mellon University, represented by Dr. Wesley Posvar and Dr. Richard Cyert, respectively. The makeup of contributors to Strategy 21 reflects its nature, a "joint (public-private) strategy that is designed to transform the economy of the Pittsburgh/Allegheny region as it enters the 21st century"[iii]. The strategy was designed by various local leaders and institutions to take advantage of emerging national and international economic trends of technology, marketing, and communications[iv]. These diverse targeted areas of investment would be pursued in specific areas of both large & small businesses, university research and development, renewed entrepreneurship, and modern technological investments in historical local manufacturing industries[v]. The diversity in the creators of Strategy 21 reflects the Strategy's all-encompassing approach to redevelopment.

The Strategy had four stated goals. Goal One was to refocus on the local metals and manufacturing industries, to improve those industries with greater production efficiency via technological investments, and to attract new corporate headquarters to the region. Goal Two was to convert existing blighted property, especially former industrial sites, for new uses. Ideal new uses for property would be technology companies and new commercial businesses. Goal Three was to enhance the region's quality of life, thereby attracting new potential residents and tourists. The final stated goal was to expand opportunities for the structurally unemployed - women, minorities, and life-long manual laborers with no other job training - by attracting new jobs and retraining people for those new jobs.[vi]

Specific project areas pursuant of these goals are more varied than the goals and their contributors. Strategy 21 targeted the Pittsburgh International Airport, the Allegheny River Valley, the Monongahela River Valley, transportation, and university-led research. Work on the Greater Pittsburgh International Airport involved the construction of a new terminal and improvements to two townships located next to the airport. The intent of the airport redevelopment was to make the entire region more accessible to potential new residents and investors, and to facilitate the day-to-day activities of existing residents and businesses[vii]. The second project area of the Allegheny River Valley targeted riverfront property in the north section of the Pittsburgh region for residential, commercial, and cultural redevelopment. These general improvement areas would attract new residents and corporate headquarters to the region.

Monongahela River Valley redevelopment targeted those locales most affected by the plight of the local manufacturing industry. Existing industries would benefit from publicly-generated subsidies and technology to make those industries financially viable again, protecting existing jobs and stimulating new ones within the sector[viii]. The transportation project area used federal and state funding to improve the transportation infrastructure of the region, namely highways. Local thoroughfares of State Routes 837, 885, 51, and the Mon Valley expressway were improved and a new highway connecting the airport region with existing highways was proposed. Transportation improvements were meant to improve other efforts of redevelopment by improving access throughout the region through R&D creation and application. Lastly, university-led research was targeted to improve all other project areas. High-quality education and research efforts would assist the revitalization of local industry, attract corporate headquarters, and build upon existing research in the fields of medical and high-technology research.[ix]

The project areas supportive of the Strategy's goals had many instantiations. Projects ranging in size from less than $1 million in private funding were to be incorporated along with highway projects worth over $74 million of state and federal funds as part of the overall strategy of transforming Pittsburgh. All of the specific projects were selected with near-term and long-term desired effects in mind. The site projects are the fulfillment of Strategy 21, the realization of desired regional improvements set forth in 1985. The relative success or failure of the projects to improve the Pittsburgh region vary from site to site.

The redevelopment plan for the Greater Pittsburgh International Airport was one of the most important site projects for Strategy 21 and its authors. The plan for the airport was to add 59 additional commercial jet gates and 30 commuter gates as part of a new Midfield terminal. The project was funded by $97 million in state funds, $50 million in federal funds, and $250 million in private funds. The stated goals of the improvements were to make the region more accessible to visiting business ventures in the near-term and attract more local business that would benefit from an inexpensive and modern airport in the long-term. Work to the airport was done in concert with retail developments in Findlay and Moon townships, adjacent to the airport. Retail and office space development from private investors were to add to airport-proper improvements, to make the airport area one supportive of private sector growth. Strategy 21 declared airport redevelopment to create an expected 18,000 local jobs[x].

By 2011, the full effects of Strategy 21 redevelopment were realized. Due to industry decline following the September 11th attacks, local airline cutbacks, and declining patronage, the Greater Pittsburgh International Airport has actually shrunk in the two decades after redevelopment was first discussed. The total number of daily flights at Pittsburgh International declined from 633 in August 2001 to 227 by November 2007. Airport traffic peaked at 20.7 million total passengers per year in 1997, falling to 9.9 million in 2006. Concessions at the airport have also suffered, falling from around $90 million to $65 million per year between 2001 and 2005[xi]. The total passenger peak in 1997 is one positive indicator that Strategy 21-specific redevelopments, completed by the late 1990's, did result in increased traffic to the airport and surrounding townships. The intended 18,000 created jobs from the project were never fully realized, and recent decline undid whatever job-creation progress was initially realized, factors unforeseeable in 1985, when improvements were first considered. The need to improve the airport again in 2011 is illustrated by another proposal called 'Aerotropolis', championed by County Executive Dan Onorato and several private development groups. The 'Aerotropolis' proposal intends to add facility improvements to the airport and supporting structures to turn the airport into a freight- and commercial-hub. The proposal, set forth in September 2011, seeks to capitalize on the region's airport, roads, railways, and rivers to create shipping and trading jobs in the region that would result from a modern, flexible airport[xii]

The Herrs Island site project, in 1985, involved the demolition of a recently closed manufacturing facility, and construction in its place of residential, office, and marine space. Herrs Island, more commonly known as Washington's Landing, was considered part of the Troy Hill neighborhood of Pittsburgh before redevelopment. A recently abandoned industrial brownfield site was renovated into waterfront housing, a marina, and public park, with walking trails, intended to create 1,000 jobs. The result of the renovation today is 88 upscale residential housing units, office buildings, and a restaurant. Total public investment for the site project under Strategy 21 was $25.5 million. That investment and redevelopment resulted in 800 jobs created on-site, and $6.03 million in annual tax revenue for the city. The Herrs Island project site, along with other local redevelopment initiatives, stimulated economic recovery along that section of the Allegheny River, north of the city center[xiii].

Although the airport project was the Strategy planner's primary project, the revitalization of the local metals industry was the most important for Pittsburghers. Closed manufacturing facilities were visible reminders of the city's decline, places where many residents and their families were employed for generations. The collapse of the metals industry had the greatest immediate impact on the region's economy, and left many locales and municipalities on the brink of complete failure. Strategy 21 addressed the issue of the metals industry decline with research into the reasons for the industry's collapse. $750,000 in state funds were used to conduct the research. The findings stated that capital investment within the industry was low, labor costs were too high given existing production methods, local taxes were also too high, and technological improvements within the industry were necessary to make companies economically stable again[xiv]. The findings from this Strategy 21 research provided the basis for public support of those private companies still operating in the region.

In 2003, there were an estimated 300 regional industrial manufacturers in the region, with an estimated payroll of $687 million. Workers in the field earned an average of $56,000 individually per year, well above the local average of $36,000 per year during the same time. The success of the industrial manufacturing sector in Pittsburgh is due to various changes made by the industry stemming from Strategy 21 recommendations. One company, Mecco Marking & Traceability, adopted new laser stamping technology to replace the labor intensive process of manual stamping of its products. This new technology application reduced labor costs and production times, allowing the company, formed in 1889, to successfully operate into the 21st century. Mecco C.E.O. Dean Frenz said Mecco is "a 118-year old company that's brand new"[xv]. The Pittsburgh region only accounts for around 4% of national production capacity of steel manufacturing, reflecting the existing deficit of remaining companies, but organization and production reorganization within the industry since 1985 has kept Pittsburgh's metals industry from collapsing, and provided the basis for future growth.

The project site of the old Jones & Laughlin works along the Monongahela River and Second Avenue was targeted for redevelopment by Strategy 21 for several important reasons. The site existed as a large brownfield site, polluted by tar pits and ferrous cyanide left over from steel manufacturing that used to take place there. The location was situated close to both the downtown business district and the Universities of Carnegie Mellon and Pittsburgh[xvi]. Strategy 21, as part of its stated goal of expanding the region's R&D capacity, targeted the site for clean-up and transformation into a research park. The result is the Pittsburgh Technology Center (PTC), an R&D site in its own right but also facilitated by nearby campuses and other research or technology institutions. Groundbreaking at the site began in 1993, carried out with $25.3 million of total public investment alongside $79 million in private investment. The University of Pittsburgh Biotechnology Center moved to the site in 1991, and a CMU robotics institute soon after. These initial tenets, chosen by Strategy 21, were joined by several other companies like Union Switch & Signal, and Aristech. By 2007, there were over 1,000 new jobs located at the PTC, close to the 1,100 estimated by Strategy 21. In addition to new job creation the public investment in PTC was repaid 12 years early by CMU and University of Pittsburgh tenets[xvii]. Strategy 21 intended for PTC development to lead to spin-offs; attracting, inspiring or directly creating new companies nearby. In this respect, the PTC is also extremely successful. Although the expansion of technology and R&D firms in Pittsburgh cannot be attributed specifically to the PTC, it has resulted in new tech-based firms and research institutions beginning in the area of the PTC. The PTC's greatest legacy from Strategy 21 is in improving the region by solidifying an internationally recognized cutting-edge technology industry in Pittsburgh.

Another old industrial site, the Homestead Steel Works in Homestead Township east of Pittsburgh, was targeted by Strategy 21 for redevelopment. The industrial site was dilapidated and the surrounding community was similarly run-down. The industrial site was 256 acres, and redeveloped as the Waterfront commercial business and residential housing development. After being targeted for redevelopment, the Park Corporation purchased the 256 acres in 1988, reselling it to Continental Real Estate in 1996. Ground-breaking began in 1999 and completed in 2002. The Waterfront quickly became successful, attracting major businesses like Barnes & Noble, Macy's, and Lowes Home Improvement. By 2007, the site was generating over $6 million annually in tax revenue, attracted numerous commercial offices, and high-income residential housing[xviii]. While the Waterfront was being constructed, local residents of Homestead created several community action groups and created an enterprise zone, giving them greater control over the redevelopment progress in their own township.

Community group efforts were intended to make sure redevelopment efforts in the Waterfront benefitted the city of Homestead as well. $100,000 of Waterfront collected annual taxes goes to improvements for the city's central business district, Eighth Avenue. The taxes are used as seed money, providing low interest loans and assistance to local merchants. In addition, another $1.3 million in public funds was made available in 2000 to improve local roads and sewers. Continental Real Estate executives have also donated $500,000 to Homestead, ensuring the city grows in concert with the Waterfront.[xix] Overall, the Homestead site project was intended to create 220 jobs, and retain another 300. The Waterfront currently employs more than 220 individuals, but the exact number of jobs created is unknown due to the wide variety of employment.

Strategy 21 also targeted the borough of Wilkinsburg for redevelopment in its center redevelopment project. Wilkinsburg had once been a business and social hub for neighborhoods in east Pittsburgh. The recent economic collapse had left Wilkinsburg with a failing local economy, numerous abandoned structures, and few businesses to serve the remaining residents. $2 million in various public funds were used alongside state Enterprise Zone policy designation, meaning local public leaders were granted greater policy decision-making authority[xx]. Strategy 21 intended for Wilkinsburg to regain its commercial and social significance.

Redevelopment in Wilkinsburg was more decentralized than other site projects from Strategy 21, realized in a variety of small initiatives and efforts. One part of redevelopment was the remodeling of long-vacant homes, houses which were in turn resold to low-income local families by the Pittsburgh History and Landmarks Foundation. Leaders formed a community art and civic design commission, which covered up blight with aesthetics designed by local artists. The community secured a grocery store in 2004, which along with a neighborhood seasonal farmer's market, serves the residents' food needs. These grocery markets now sit side by side with a variety of upstart service industry businesses, although Wilkinsburg still suffers a 15% vacancy rate (compared to about 5% vacancy rates county- and state-wide)[xxi]. The redevelopment of Wilkinsburg, which began in 1985 with Strategy 21, is still ongoing. The central business district therein is still dotted by blighted and abandoned buildings, but the borough has made significant progress in reversing the economic depression that began with the failure of heavy industry in Pittsburgh.

The project area of transportation addressed in Strategy 21 consisted of several project sites. The only major new construction project was the Southern Expressway project. The Southern Expressway was proposed to connect US Route 376 West with the Beaver Valley Expressway near the Greater Pittsburgh International Airport. The proposed construction was only 6.8 miles, and primarily designed to make the airport area more accessible to the city of Pittsburgh[xxii]. The southern expressway opened in 2006. This new highway construction pales in comparison to expansion and renovation of existing roadways under Strategy 21. Portions of Route 48 east of Pittsburgh were increased to four lanes ($14 million). Route 148 east and south of the city was renovated to reduce traffic bottlenecks ($10 million). The Tri-Boro Expressway connecting Monroeville with Pittsburgh was increased to four lanes ($20 million). Routes 885, 837, and 51 were all expanded to improve outside access to Pittsburgh's downtown and central business district ($30 million). All of these projects were completed in phases over time, and improvements called for by Strategy 21 are completed. The total cost of the southern expressway and the various Mon Valley projects were $76 million and $74 million respectively, all with federal highway funds[xxiii].

Strategy 21's final project area of improving local university-led research was discussed previously in the development of the Pittsburgh Technology Center on an old J&L Steel Works site. Technological and research-related site projects were not limited to the PTC, however. The site project from Strategy 21 that was most promising in attracting new research and technology institutions to the region was the old Gulf research lab in Harmarville, approximately 10 miles up the Allegheny River from downtown. On April 1, 1985, the Gulf Oil Corporation donated its $100 million research park to the University of Pittsburgh. The site was intended to provide companies and institutions with low rent research facilities staffed by locally educated or trained specialists from various local universities. Research to be completed there would benefit from the collaborative environment fostered on site. The site had to be basically renovated before it was opened, and Gulf Oil Company matched Allegheny County's initial investment of $3 million each for that renovation[xxiv]. Strategy 21 planners estimated that spin-offs and other new companies that would be created by the Harmarville facility would generate hundreds of millions of dollars in local investment, and 1,200 to 2,000 jobs.

By 2006, the University of Pittsburgh Advanced Research Center (U-PARC) had exceeded Strategy 21 expectations for success. U-PARC offered lab and office space on site for the low industry cost of $15/ft^2 and is actually out of open space. A drawback of the site for potential renters/investors is that U-PARC is located relatively far from universities and other research sites in Pittsburgh itself. A lack of open space, along with the success of the Pittsburgh Technology Park and other Oakland-based research areas, have led many potential U-PARC investors who may have been looking to set-up shop closer to Pittsburgh[xxv]. Over the next 20 years, U-PARC is not expected to grow further, while research parks within the city are expected to continue their high growth.

Two other draws for potential technology investors within the city are products of Strategy 21 as well. The Pittsburgh Supercomputing Center and CMU's Software Engineering Institute are both products of planning and investment during the 1980's. The Supercomputing Center was a joint proposal by General Electric, CMU and Pitt to establish a national supercomputer center in Pittsburgh. The center was intended to act as a hub for national research, with a high-speed data network connecting the computing center with the region, and the region with the country. $20 million in local private and state funds along with $50 million in federal funds to build the center in Oakland were expected to produce around 45 full time jobs[xxvi].

The Pittsburgh Supercomputing Center computer terminals were installed in Monroeville's Westinghouse facility in 1986. The computers are remotely controlled from the Oakland center, located almost equidistant from CMU and Pitt campuses. In 1999, the Center expanded to include West Virginia University and the US Department of Energy. The Center has brought national and international recognition to itself and the region for the Center's relationships with researchers, universities, and the federal government. When Westinghouse Electric, the division that maintained the computers in Monroeville, was sold to a British nuclear fuels corporation, that corporation stated that they would be "extremely supportive of continuing [the Center's] relationship" within the regional high-tech field[xxvii]. This statement is a reflection of the corporation's business model, but also of the success the center has generated.

Along with the Supercomputing Center, Strategy 21 called for a federally-funded software institute to be built in Oakland near the Carnegie Mellon University campus. Carnegie Mellon had won a national competition to be awarded the contract, the first federally funded R&D center built in the US since the 1960's. Factors that affected the government's decision to award the contract to CMU in Pittsburgh were the inexpensive initial property and facility costs, and the likelihood of inexpensive future growth given cheap local land costs. The primary source of funding was a $100 million federal grant, $4 million in state funding, and $17 million private, intended to create 250 jobs[xxviii].

The federal contract and local policy resulted in the Software Engineering Institute in Oakland near CMU campus. The Institute opened in 1984 and by 2007 employed 500 people in its 128,000 ft^2 facility. One program from the Institute is the Community Emergency Response Teams program, coordinating federal, state, and local first responder internet security. Similar to U-PARC in Harmarville, SEI's growth has outpaced planning. By 2007, the SEI was seeking to expand its facilities to accommodate increased demand for its services[xxix].

With Strategy 21 site projects complete, is efficacy in achieving stated goals can be gleaned by the progress of its site project instantiations. Strategy 21's first goal, to strengthen local heavy industry by investing in its future, was moderately successful. Although many Pittsburghers hoped for a full return of giant industrial corporations, a full return to normalcy as a primarily industrial city was unrealistic. One of the largest contributors to the decline of the steel industry during the 1970's and 1980's was decreasing corporate profits from escalating labor costs. High labor costs negatively affected capital reinvestment in machinery and technology by many manufacturers affected by the economic decline. Given the cheap cost of labor and shipping costs overseas, along with a global increase in international commerce, the metals industry in Pittsburgh was bound to be undone by market forces of demand for cheaper products. But Pittsburgh's metals industry was not destroyed. The decline during the 1970's and 1980's was followed by a stabilization during the 1990's when public and private investment in the industry restored financial solvency. The public and private investment and sector research during that time, officially rendered as part of Strategy 21, stopped the ebb of local industry.

As illustrated through the example of the Mecco Corporation, investments in technology and the adoption of newly researched production methods made local industrial producers competitive in national and international markets. The research and innovations that saved many manufacturers were products of Strategy 21 policies, and future innovations for those manufacturers are being formulated in research institutions that are also products of Strategy 21[xxx]. Although falling short of the goal of attracting new and international attention to the local metals industry, Strategy 21 did protect the industry from total collapse and strengthen it so that the industry might regain a portion of its former production capacity in Pittsburgh.

The second goal of Strategy 21, to convert underutilized land for reuse and retrain the local work force, is ongoing. In converting underutilized land, most specific project sites were constructed on converted brownfield sites. The land was converted in a variety of means, from soil treatment in isolated extreme cases to simply paving or adding topsoil over the site. Underutilized land existing as brownfields are usually capital intensive to convert. Given the high cost, land in Pittsburgh has typically been converted only when its conversion will yield economic benefit. Many sites have been converted under Strategy 21, and many other sites converted for similar unaffiliated redevelopment efforts. Unfortunately given the great losses suffered during the 1970's and 1980's many more sites in the region remain underutilized, and often hazardous.

The region's work force is an issue still requiring attention, and is perhaps the region's greatest problem affecting growth. While Strategy 21 was successful in attracting a wide variety of 21st century jobs in technology-driven fields, much of Pittsburgh's work force is still undertrained to fill these jobs. Combined with the earlier-established reality of few new manufacturing jobs, many former industrial workers still suffer unemployment or underemployment in sectors like the service industry. Although the city's universities provide high-quality training and education in a variety of fields, Strategy 21 did not result in large-scale retraining programs, aside from traditional four year education institutions. The local work force requires further attention to develop into skilled workers in modern fields.

The third stated goal from Strategy 21 was to make Pittsburgh more livable for residents and enticing for tourists to visit. 'Livability' may not be quantifiable, but Forbes.com rated Pittsburgh 'America's Most Livable City' in 2011 and 2012. Pittsburgh was ranked number one on the list because of low cost of living, prevalence and accessibility of parks, and a cadre of other criteria. Alongside the Forbes distinction, The Economist in England named Pittsburgh the number one livable city in the U.S., and 29th in the world[xxxi]. Although the city has not attracted many new national and international corporate headquarters as stated under Strategy 21, it has attracted the attention of people all over the US and the world.

The final overall goal, to expand opportunities for the structurally unemployed, remains unrealized. Part of this goal plays towards the same end as retraining the local work force, which as stated earlier was not accomplished by Strategy 21. Many of Pittsburgh's structurally unemployed - African Americans especially - were employed by industrial manufacturers in the region. They were relegated to the industry's worst jobs and performed them for less pay than white employees at the same company. A marginal existence working in heavy industry was made impossible by the industry's decline. The emerging jobs in Pittsburgh, related to technology, were out-of-reach for these same people during the region's recent revitalization. Unemployment is higher among African Americans than Caucasians today, meaning that Strategy 21 did not meet its goals of better serving these Pittsburghers.

Public-Private Cooperation and Strategy 21: Lessons Learned

Strategy 21 was unique in that it was a collection of policies and legislation intended to revitalize the Pittsburgh region, severely affected by economic decline. The initial economic decline resulted in fiscal and social issues, which when taken altogether seemed insurmountable to correction by local leaders. Given the sparsity of local resources to deal with these issues head-on, local public leaders teamed up with private leaders to combine resources and efforts to promote growth in the region. The city of Pittsburgh and its citizens had to reverse a local economic depression using creative problem-solving and collaborative efforts. With relatively limited state and federal funding and much less local funding, the region as a whole was able to stop the depression by transforming the city in short order.

Given the economic recession that swept the country in 2008, economic recovery is now a national concern. How to improve economic conditions with limited capital resources is an issue being debated heatedly on Capitol Hill and in states across the country. Every local condition of economic depression cannot be solved by identical steps, but I believe that important lessons can be learned from the study of Pittsburgh's recovery through Strategy 21. The roles and relationships of public and private actors during economic revitalization can be marshaled in various concrete ways, but to get the most efficient results possible given the inputs, general trends from Strategy 21 can be extracted and applied elsewhere.

The first general lesson learned from Strategy 21 and Pittsburgh's recent regrowth is in the division of tasks. 'Public authority, private initiative' refers to general roles for public and private actors. In the case of Pittsburgh, public actors are represented by the City of Pittsburgh, Allegheny County, and various local governments. These actors generally had much authority and power to enact change in the region. Through the use of taxing powers, eminent domain, and new legislation, public actors have many possible tools for redevelopment at their disposal.

Public power and authority can affect change. But how they affect change is limited by the various skills of those public actors. For instance, the City of Pittsburgh could provide for the construction of a new bridge in Pittsburgh, and decide where the bridge is installed, its type, the construction schedule, etc. Traditionally, these details are left up to government officials. The overall project is intended to benefit the city, however, and relying solely on public decision-making leaves out those who will use the bridge - private citizens. Private citizens should therefore decide specifics of the bridge project so that the end result is most beneficial for city residents. Having every citizen put in his 'two cents' is not practical, so private interests are best represented by community groups and committees[xxxii]. Conversely, if the city residents desired a bridge, they could not simply buy property and begin construction. Acquiring land, collecting and managing finances, and large construction projects are best achieved by government because of the necessary authority to carry out those tasks.

The division of tasks must therefore be creatively divvied to various public and private actors. Generally, public bodies can better facilitate projects through legislation and policy, so that competent private concerns can decide upon that project's details and enactment. By government concentrating on the big picture while private actors concentrate on the details, the project is more likely to meet its intended purpose as efficiently as possible given real-world conditions.

The second lesson learned is the importance of where a community invests its resources. If Strategy 21 called only for financial bail-outs of metals manufacturers instead of long-term investments within the industry, the industry would have more than likely completely collapsed over time. Instead of using resources to invest in the near-term financial solvency of the industry, Strategy 21 called for investments in the future of the manufacturing. In this sense, Strategy 21 did not invest in the contemporary industry, but in the future of the industry.

The difference between short-term investment and long-term investment is not easily discernible. In the case of Pittsburgh, the existing industry was failing, so investments were made in what the industry was expected to become, namely less labor and more technological innovation to reduce operating costs[xxxiii]. In this sense, the investment was not in an existing field but in the field's long-term development. The lesson of investing in future fields can be made in another aspect of Pittsburgh's revitalization. Health care systems in Pittsburgh are developing medical advances and innovations at U-PARC, the PTC, and elsewhere. Instead of investing in current or near-future techniques, they are investing in technologies not likely to become profitable for decades, like advanced transplants and biotechnology[xxxiv]. Pittsburgh health care systems are not just investing in technology to be used on patients during this decade, but also in the next decade, ensuring long-term financial success.

The third lesson learned from Strategy 21 is the decentralized control of operations. As aforementioned, government organizations have a great amount of power and authority to enact change upon the area and populace. This plethora of power coincides with a severe limit on efficiency because of controls on, and limited personnel and resources within, the government itself. The government might have budget specialists but few certified public accountants, an arts coordinator but no artists, and city planners but no construction firm. The private sector has all of the assets necessary to make the changes most efficiently, given the inputs, and to be beneficial in its effect of serving the community as intended by its construction.

A similar term for decentralized control of operations is privatization. By eliminating large government departments for smaller, more specific departments, waste from redundancy and bureaucracy is minimized. Despite the loss of resources this reduction entails, these government bodies should maintain their power to enact change. The resources eliminated from government bodies are replaced by private resources, more flexible and specially-skilled than any government department. By putting a similar amount of power in smaller, more specialized public-private cooperatives, much waste is eliminated and decision-making is relegated to fewer and more intimately concerned officials.

The last lesson learned is not as much a lesson as it is an approach. Strategy 21 was ultimately successful in revitalizing Pittsburgh because it called upon aspects of the city that were not usually involved in policy and development. A 'whole city approach' refers to city leaders from all aspects of the city - government, community, business, cultural, and religious - combining their represented skills and resources to work together towards collaboratively- decided goals for the city. The collaborative nature of these informal relationships results in a regional unity of effort, ensuring all aspects of the region are working towards the same goals. Had the metals industry and technology research fields not worked collaboratively during the early implementation of Strategy 21, both fields would have more than likely developed more slowly over time, resulting in smaller fields than actually exist due to their partnership.

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