

If You Build It, They Will Come: From Flood Zone to Economic Boom

History 696, Senior Capstone

Cushman

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Abstract-

On July 30, 1993, the newly-unified city of Chesterfield, Missouri bore witness to the most tumultuous disaster since its incorporation in 1988. The levee surrounding the area, fittingly named the Gumbo Flats, breached in four separate places, the result of a perfect storm of high winter snow volumes and dangerously high levels of rainfall, among a multitude of other indirect factors. Massive flooding drowned the lowland area, leaving the entire Valley submerged under eleven feet of water.

But the flood itself is not the focal point of this article; the real story is how a suburban town, barely five years old, rallied around its residents, city officials, state legislators, and federal agencies to restore, renovate and evolve the Chesterfield Valley area into a real estate goldmine. By analyzing hundreds of city press releases and examining administrative action plans, I determined the critical decisions made regarding the renovation of the levee and the sources of funding that built the now-thriving Chesterfield Commons. In particular, levee enlargement and tax increment financing (TIF) catalyzed the creation of a corporate and community real estate mecca.

Throughout the history of modern disasters, the profitability of capitalism in the wake of a disaster has proven to be a common, and primary, factor in successful restoration and rejuvenation projects. Kevin Rozario, author of *What Comes Down Must Go Up*, presents the idea of creative destruction as a basis for how disasters pave the way for capitalistic business endeavors. He argues, “so deeply has the link between disaster and development become that even those who have fought most vigorously to contain the ravages of capital have tended to

view further destruction as the necessary precondition for healing modernity's harms"¹. The Chesterfield Valley is an exemplary model of this belief system, a true "out of the ashes rises the phoenix," where ingenuity and community came together to direct infrastructure development, and an entire town's willingness to inject finances where they were needed most established the foundation for a suburban city's billion-dollar-and-counting economic powerhouse.

I.

They should have seen it coming. The 1993 flood that destroyed the Gumbo Flats was a disaster in the making, given the lack of infrastructure surrounding the area. Flood waters swept through Chesterfield Airport, residential homes, and business communities with force, and remained stagnate months after the initial breach of the levee. The destruction required inexperienced city officials to begin disaster mitigation, something they had never attempted in the newly-founded city. Leaders made on-the-spot decisions that would later turn the city of Chesterfield into one of St. Louis's premier suburbs. The "Valley" underwent major upheavals throughout its restoration and development phases, and its many setbacks led people to doubt if the city would ever recover.

Of course, the impact of disasters on communities gain the immediate attention of local and national news and social media, but the regional political and economic factors remain hidden behind the stage until scholars come along to lift the curtain. Rozario's "creative destruction" rarely peeks its controversial head around the drapes; the concept would be, at best,

¹ Biel, Steven. 2001. *American Disasters*. NYU Press. Pg. 72-102.

an oxymoron, and, at worst, anathema to the victims struggling to pull their lives back together after ruin.

In contrast, this theory that disasters can lead to successful, capitalistic ventures became a rallying point for the Chesterfield Valley development project, and as the adage goes, in the midst of darkness, there is light. Success stories like Chesterfield, Missouri, or Galveston, Texas, provided policy makers with solid models to emulate, and gave scholars the opportunity to study in-depth the intricate environmental and political decisions that led not only to recovery, but to decades of financial prosperity. The 1993 Chesterfield Valley flood restoration effort is a powerful case study for understanding the potential profitability rooted in communal, capitalistic endeavors.

The newly incorporated municipality's dedication to reviving the massive flood zone was immediate and encompassed every level of government. Since the young city had never experienced any disaster of this magnitude or severity, leaders were not prepared for the dire consequences, nor the complexities, of a large-scale flood mitigation and clean-up process. The first problem they faced: how to reduce water levels systematically using environmentally-sound practices for a permanent solution, not just a temporary fix that kicked the problem down the road.

Once the waters receded, the question of what to do with all the waste generated widespread political attention. The "dumpster dilemma" required local and state officials to work together to maximize clean-up efforts. But obtaining and placing large, industrial-sized dumpsters around the tiny commercial district of the Valley left too many residents waiting for

the much-needed trash disposal resources². While cities and established suburbs, with their sizable populations, business communities, and tax revenues, enjoyed an abundance of resources for disaster recovery, a new exurban town like Chesterfield didn't have the money or ready access to clean-up equipment, in this case, hundreds and hundreds of trash bins.

Nevertheless, in the heat of flood mitigation and removal of waste, the Chesterfield city government preemptively started talking about how to restore the levee. The result of their time-crunched dialogue turned into the most innovative, most progressive decision made by any local government to date.

The renovation and upgrading of the levee was the key variable in generating an area suited for land development. Rather than redeclaring the Valley as a floodplain and implementing flood management strategies, the city government pitched the implementation of flood control structures, specifically, increasing the size of the levee and adding drainage systems and water pumps. This proactive decision took the decision-makers far beyond recovery and mitigation, and brought them closer to their ultimate goal of a sustainable land development that would thrive in commerce and community engagement.

Once the plans were certified by the Army Corps of Engineers, developers and city officials began the near-impossible task of bringing residents and corporate business leaders together. The risk taken by those policymakers, business leaders, and ordinary citizens became legendary, and what started as a floodplain wasteland rapidly grew into a thriving economic hub for retail, business, and recreational activity. The dedication and ingenuity of these decision makers proved that capitalism, when used as a disaster response tool, can produce long-term

² City of Chesterfield Daily Flood Recovery Information, Bulletin No. 15. September 3, 1993.

wealth generation, both for the city coffers and for an entire community's shared sense of purpose.

II.

The Gumbo Flats, prior to July 30, 1993, was home to local farms, a municipal airport, and a limited number of small businesses. Considering the area was sectioned off in a floodplain, the idea of developing it for retail and entertainment purposes was not only counterintuitive, but crazy. Situated south of the Missouri River and east of a major tributary flowing directly into the Missouri River, geographically the valley represented a development nightmare given the location of each body of water (See Figure 1). Ample flooding opportunities existed on both the north and west sides. Moreover, because most of the valley served as cropland for farming, floodwater swept through the area with ease and held stagnate for months, even after the city's engineers repaired the breaches.

To illustrate, if a hole is cut in a plastic tub, and water is pumped into the tub until it starts to overflow, the hole where the water entered is covered up, but the water inside remains. This is exactly what happened in Chesterfield Valley. An area surrounded by a hundred-year levee became the world's largest bath tub for months on end. Figures 2 through 5 demonstrate the severity of the flooding and shows the sheer amount of water that remained in the Valley even after city engineers patched the breaches.

Aside from the land lying in the major floodplain, numerous other factors accelerated the likelihood of a massive flood. Starting in the fall of 1992, abnormal levels of rain created excessive moisture in the soil that would later cause major issues for the structural integrity of the Chesterfield levee. Compounding the late fall rain was the large amount of snow through the

winter months. When the weather warmed up and the snow melted, the water flowed fast into the nearest body of water, significantly raising the elevation of the Missouri River. The heightened elevation caused the flow rate of the river and tributaries to increase as well, placing more and more pressure on the levee to withstand immense force.

Figure 6 shows the Valley pre-1993 flood and post-development side by side. A small tributary can be seen south of the Missouri River where, in 1993, the pinching of this offshoot correlated to the increased flow rate and added pressure on the levee. While flow rate does not necessarily cause severe damage to buildings, it does cause severe damage to roads and open land. And the largest contributing factor was the overabundance of rainfall throughout the summer. Most areas in the United States affected by the flood, a total of 400,000 square miles, experienced nearly 100 percent of their annual rainfall in only three months³. The force that came with such high levels of rainfall, combined with the compromised structure of the land and the natural waterways surrounding it, proved to be too much for the levee to handle. The young city, lacking infrastructure or experience, was in for the fight of its life.

In 1993, only a 100-year levee surrounded Chesterfield Valley. Scientifically, the levee had a one-in-one-hundred chance of being breached every year, a statistic derived from environmental and structural engineers and statisticians⁴. Given the geographical threats surrounding the Valley, it was only a matter of time before the levee would break, when the Missouri River and a large tributary west of the Valley forced thousands of gallons of water to flow directly into the area. Figure 1 shows the Valley today, but the west tributary and Missouri

³ US Department of Commerce, NOAA. n.d. "The Great Flood of 1993." Accessed April 21, 2019. https://www.weather.gov/dvn/071993_greatflood.

⁴ Meyer Mark, Environmental Engineer. Interview conducted March 2019.

River connection became silent, but powerful, partners in 1993, waiting for the right moment to strike.

III.

The lack of city foresight and infrastructure exacerbated the problem. When the flood finally came, it wreaked havoc among Chesterfield's local organizations. The Chesterfield police station, fire station, and airport were completely submerged underwater, and the young city government still had to figure out where to even start in terms of flood mitigation and infrastructure regeneration. The valley itself was ruined, with homes destroyed, people displaced, and crucial city operating organizations underwater.

In the lowest areas of the Flats, homes and businesses and farms drowned under twenty feet of water. On average, buildings across the floodplain withstood at least eleven feet of water damage. Homeowners fled by car or on foot. One survivor story, televised a year after the flood, told of a pregnant mother who, in her attempt to escape the rising water, was nearly swept away in her car with her dog. Her husband prevented the car from floating away by blockading it with his van, successfully saving his wife and unborn son⁵. Across the Valley, people waited for months, displaced from their homes without any relief or money for repairs.

Forty-three homes were destroyed. Formerly profitable businesses like the Citco gas station and Annie Gunn's Smokehouse were inoperable. Figures 7 and 8 show the water levels surrounding these now historic landmarks. Nearly three hundred businesses had to close their

⁵ "Flood of '93' - Survivor Stories from the Chesterfield Valley | Ksdk.Com." July 26, 2018. Accessed April 21, 2019. <https://www.ksdk.com/video/news/history/flood-of-93-survivor-stories-from-the-chesterfield-valley/63-8201313>.

doors permanently, or at least for a significant period of time⁶. Combined with the loss of homes and corporate structures, the Valley lost 5,300 jobs⁷.

The other major problem concerned the lack of highway access, the flood water effectively cutting off all paths to the Interstate. Highway 70 East and West still operated north of Chesterfield, but drivers had no way to get there, and Highway 64, running parallel to the city, was shut down completely.

Amid rising water tables and a desperate town on the brink of extinction, the neophyte city government had to tackle their first major cleanup initiative: halting and disposing of the flood waters. With the support of the Army Corps of Engineers, the town had to repair the breaches in the existing levee and bring the surging flood waters to a halt. Unfortunately, all the roads leading to the levee were underwater, so builders had to construct new roads in order to even begin repairing each breach. Not until three weeks after the original breach did the Chesterfield Monarch Levee District start “plugging” the levee. “Levee officials estimate[d] that the remainder of the work on the levee plug will take 2-3 weeks”⁸, a long time to construct a temporary solution.

At the same time, city leaders began dialogue on the possibility of upgrading the Valley levee to a long-term, five hundred-year solution. The choice to explore flood control strategies became the biggest decision that forever changed the city of Chesterfield. Officials approved

⁶ “Flood of '93’ - Survivor Stories from the Chesterfield Valley | Ksdk.Com.” July 26, 2018. Accessed April 21, 2019. <https://www.ksdk.com/video/news/history/flood-of-93-survivor-stories-from-the-chesterfield-valley/63-8201313>.

⁷ Ibid

⁸ City of Chesterfield Daily Flood Recovery Information, Bulletin No. 3. August 16, 1993.

plans to build a significantly larger levee, ensuring a natural disaster of that magnitude and loss never happened again.

The city pledged \$1 million toward the construction of a new levee, unknowingly promoting an incredibly positive, progressive message to Chesterfield residents and developers. The sheer effort and collaboration required for flood mitigation, and the amount of time needed to accomplish tasks at the local, state, and federal levels, meant every political interest had to be appeased and every hidden agenda had to be addressed. Local officials held strategic conversations about the rejuvenation of the Valley, while state organizations, such as the Monarch Levee District, in conjunction with the Federal Army Corps of Engineers, sought to begin attacking the disaster at the source.

According to Mike Geisel, Chesterfield's Assistant City Engineer with the Department of Public Works in 1993, one of the initial problems faced in the wake of the flood was discovering the best possible way to lower water levels throughout the Valley. City officials sought to simply breach the opposite side of the levee, allowing flood waters to pour through the lower portion of the Valley, accomplishing one gain at the expense of another loss. At this point, the Army Corps of Engineers stepped in, providing additional water pumps to hasten the process of lowering the water level safely and systematically. Coupled with strategic cuts through parts of the levee, flood waters flowed rapidly out of the Valley.

The lack of experience among city officials compounded the successful removal of flood waters. Without knowing how to respond, the town's efforts to mitigate the flood waters and come up with a lasting solution turned into a tangled web of competing interests circulating around where to begin disaster relief. Though officials endured several setbacks, the town's eventual response became a testament to the cooperation between federal, state, and local

governing bodies. Without the expert advice of the Army Corps of Engineers, the decision to cut the opposite side of the levee breach would have exponentially increased the number of problems resulting from the flood⁹. Moreover, local organizations such as the Chesterfield Monarch Levee District and the Metropolitan Sewer District were provided with additional resources from the Army Corps of Engineers to further the removal of flood waters, allowing the city to begin reconstruction¹⁰. Once the water receded, the city started the process of waste removal, a mountainous task in and of itself.

Because of building materials' corruption and damage to foundational structures, flooding is one of the most destructive natural disasters. Drywall and other synthesized materials soak up water and become structurally compromised, leading to the gutting of many businesses and homes. To facilitate the proper disposal of debris, the city of Chesterfield placed 237 dumpsters throughout the affected areas, a resourceful solution that was nevertheless problematic during the clean-up phase. Dumpsters were not readily available in mass quantities, so the city had to place them in widely accessible areas with the unintended consequence of a residential waiting list, coined "The Dumpster Dilemma"¹¹.

Local churches got into the game, focusing voluntary efforts around waste removal to combat the shortage of dumpsters. Sponsored by the St. Louis Family Church, the Chesterfield Area Relief Effort (C.A.R.E.), with the help of over 220 volunteers, worked collectively to remove debris from sixteen homes and six businesses. Additionally, organizations such as the Salvation Army and other church organizations stepped in with one hundred more volunteers to

⁹ Geisel, Mike. Assistant City Engineer. Interview Conducted March 2019.

¹⁰ City of Chesterfield Daily Flood Recovery Information, Bulletin No. 7. August 20, 1993.

¹¹ City of Chesterfield Daily Flood Recovery Information, Bulletin No. 16. September 8, 1993.

assist with the relief effort¹². The Rockwood School District urged staff members and student families to participate in “Rockwood Clean-up Day in the Valley”¹³. The day turned into a major restoration event that promoted a unification of goals between city officials and residents. Rockwood Clean-up Day in the Valley, held on September 11, 1993, combined with Chamber Clean-up Day in the Valley to create a holistic effort focused on waste removal and restoration. Through these clean-up initiatives, city officials, alongside state and federal entities, were able to transition into the next phase of disaster recovery: redevelopment.

IV.

Due to the nature of flooding disasters, the reconstructing efforts had to start on the outskirts of the city and progressively move into the heart of the Valley. A few organizations set the stage for the rebuilding efforts, namely Spirit of St. Louis Airport and Annie Gunn’s Smokehouse. Located on opposite ends of the Valley, these two businesses represented an outside-inward renovation to Valley businesses. Most important, the airport and Annie Gunn’s were icons in the Valley, staple organizations willing to reestablish their foundations in the Valley. Their dedication sent a positive message to residents and other Valley businesses and helped to recruit new businesses.

A major contributing factor to the rebuilding of the Chesterfield Airport was the decision by the FAA to reestablish the Automated Flight Service Station, “represent[ing] a major commitment and will greatly support the re-establishment of full flight operations at Spirit of St. Louis Airport”¹⁴. On October 1, 1993, the airport reopened to full operations.

¹² City of Chesterfield Daily Flood Recovery Information, Bulletin No. 13. August 30, 1993.

¹³ City of Chesterfield Daily Flood Recovery Information, Bulletin No. 15. September 3, 1993.

¹⁴ City of Chesterfield Daily Flood Recovery Information, Bulletin No. 9. August 24, 1993.

Annie Gunn's Smokehouse, rather than just focusing on rebuilding and continuing pre-flood operations, sought expansion in the wake of the disaster. The smokehouse's strategic use of legislative tools allowed its owners, Thom and Jane Sehnert, to accomplish a re-zoning effort that expanded the overall size and operational capacity of the restaurant and meat market. The Sehnerts' expansion paved the way for future business renovations over the next fourteen years.

The city of Chesterfield, in collaboration with the Federal Emergency Management Agency (FEMA), created a six-step process for the rebuilding of both businesses and homes: 1) determining flood hazard area, 2) applying for a building permit, 3) issuing of a building permit, 4) conducting a building inspection, 5) conducting a second, separate building inspection, and 6) securing an occupancy permit¹⁵. Businesses and individuals flocked to City Hall, and administrators processed hundreds of permits within the first year after the flood.

But the hundred-year levee still needed a solution. Businesses would never invest if the structural integrity of the levee remained in question. The levee had to withstand the coming spring season and avoid "the two-year cycle of flooding"¹⁶. The city extended the deadline for recertification to April 1, 1994, giving Kolb Construction Company, the company responsible for Phase II of the levee repairs, ample time to finish the project. The Chesterfield Monarch Levee District funded the initial cost for the recertification work, totaling \$7 million¹⁷. Again, the willingness to cooperate and put individual interests aside made all the difference, as city and state officials, private companies, and FEMA worked together to rebuild the levee in record time.

¹⁵ City of Chesterfield Daily Flood Recovery Information, Bulletin No. 15. September 3, 1993.

¹⁶ City of Chesterfield Daily Flood Recovery Information, Bulletin No. 30. January 6, 1993.

¹⁷ Leonard, Mary Delach. August 9, 2013. "Monarch Levee Transformed Chesterfield Valley." Accessed April 21, 2019. <https://news.stlpublicradio.org/post/monarch-levee-transformed-chesterfield-valley>.

Getting the levee recertified within the legal parameters procured by the Army Corps of Engineers was of paramount importance; once the recertification passed, the city could begin discussions of new development for the Valley. So, Chesterfield officials went further. They began a dialogue to consider the potential profitability of a five hundred-year protection guarantee for a better levee. The only question was how to pay for it. A legislative solution arose called Tax Increment Financing, and this proactive solution moved the city from relief and reconstruction efforts to a more engaging phase of growth and development.

Tax Increment Financing (TIF) was a strategic legislative tax collection process that calculated the difference in tax revenue between years, and then allocated those tax dollars into a specific development fund. To legally access TIF funds, the city of Chesterfield had to fully dedicate the land to redevelopment. Moreover, to procure tax increment financing, the money earmarked for redevelopment had to be used in the public domain, meaning no private developments could benefit from TIF funds. This requirement bound policy makers to use the funds generated through TIF for “public parks, recreation areas, streets, public utilities, and public improvement of any nature”¹⁸.

Residents appreciated the TIF limitations, which encouraged the city to allocate the money for holistic, community growth rather than individual corporate achievement. For example, a sample district worth \$20 million in a base year is targeted for redevelopment. The following year, the valuation of the land increases 100 percent to \$40 million. The difference between the two years is then multiplied by the current tax rate, say 0.09. This leads to a

¹⁸ Casella, Sam, Tschangho John Kim, Clyde W Forrest, Karen A Przepyszny, American Planning Association, and Planning Advisory Service. 1985. *Tax Increment Financing*.

collection of nearly \$2 million, solely for development purposes. Cumulatively, the decision to declare Chesterfield Valley a TIF district resulted in almost \$72 million in new funding¹⁹.

The most important piece to Tax Increment Financing is that the money generated from a district's appreciation must be used for public improvements. In Chesterfield's case, this stipulation led to a host of residual private investments. Building more highway access points, along with incorporating traffic reduction strategies, gave developers positive incentives to relocate where their potential profitability would only rise as the district grew. Structurally, the discussion to build a five hundred-year flood protection guarantee spawned the idea of using TIF to enlarge the levee. Since a bigger, stronger levee fell under the category of public improvements, the decision to declare the Valley a TIF district allowed local government to bring new ideas, such as the shopping area, Chesterfield Commons, out from behind closed doors and into the eyes of the public.

As a result, the originally pledged \$1 million for repairing the existing levee raised the preliminary valuation of the entire Valley, proving that investment in infrastructure led to more funding for future community and business projects. Five major projects benefitted from TIF funds: "raising the Chesterfield levee, addition of [the] Boone's Crossing exit off I-64, construction of Edison Avenue, addition of water and sewer lines, and various drainage systems throughout the Valley"²⁰. Each of these highway and infrastructure projects substantially increased the yearly valuation of the Valley, which ultimately enticed private developers,

¹⁹ Leonard, Mary Delach. August 9, 2013. "Monarch Levee Transformed Chesterfield Valley." Accessed April 21, 2019. <https://news.stlpublicradio.org/post/monarch-levee-transformed-chesterfield-valley>.

²⁰ Shapiro, Mary. December 12, 2007. "City Ends Valley TIF District 10 Years Early." Stltoday.Com. Accessed April 21, 2019. https://www.stltoday.com/suburban-journals/city-ends-valley-tif-district-years-early/article_9e666eb0-4456-5a0a-909c-e03207f5e1a3.html.

through an exponential increase in vehicle and foot traffic, to invest. Local officials analyzed the potential profits associated with the designation of the Valley as a TIF district, and thirteen years later, their predictions proved to be profoundly accurate. The city of Chesterfield accumulated over \$72 million in funding for the Valley project through tax increment financing.

Chesterfield's decision to use TIF as the fiscal backing for its additional infrastructure wasn't unique. *The idea behind tax increment financing blossomed in California in the 1950s, when the federal government offered substantial urban renewal grants to communities that could come up with qualifying funds*²¹. *Local officials in several districts suffering from decades of urban blight and poverty decided to sell bonds secured by the future tax revenues they thought would result from the federal investment, and the idea evolved*²². The practice gained popularity in local municipalities throughout the 1980s and '90s, when officials shifted their use of TIF out of urban, rundown areas into exurbs and suburbs with more generic public investment and means for infrastructure financing²³.

Local municipalities like Chesterfield possessed a variety of economic development tools including, but not limited to, tax abatements and enterprise zones. The major difference between Tax Increment Financing and the latter was that TIF primarily sought to lower capital costs for developers²⁴. The town could have increased existing taxes, or created a new tax altogether, but the disadvantages of that strategy far outweighed any advantage, especially if it meant disgruntled, even outraged townspeople that might speak out against their leaders²⁵. TIF, then,

²¹ Briffault, Richard. n.d. "The Most Popular Tool: Tax Increment Financing and the Political Economy of Local Government." *The University of Chicago Law Review*.

²² Ibid

²³ Ibid

²⁴ Ibid

²⁵ Ibid

became the ideal choice for local officials attempting to increase infrastructure and promote business development, at the same time ensuring Chesterfield residents fully supported the initiative.

V.

Once the Valley became a TIF district, combined with the added protection from a five hundred-year levee; the city of Chesterfield embarked on a thirteen-year journey of enormous, cumulative growth. Though FEMA usually required businesses to purchase flood insurance, the agency no longer *mandated* that businesses in Chesterfield Valley buy flood insurance due to the high protection level of the new levee surrounding the district. The FEMA waiver played a major role in bringing even more developers due to the reduction in annual operational expenses.

The addition of the Boone's Crossing exit doubled the access points to the Valley, which also doubled the number of potential consumers traveling through the area. At the same time, land remained cheap because of the 1993 flood, and with the new levee, developers could purchase it nearly risk-free. Essentially, the flood increased the amount of land available for development, while it reduced the price per acre to next to nothing. The supply and demand curve shifted, as land acquisition skyrocketed while prices remained low (See figure 9).

Economists characterized the growth of the Valley, and the city of Chesterfield as a whole, in the aftermath of the '93 flood as anomalous, given the compounding years of 100 percent expansion in new businesses and employment opportunities. The physical widening of the Valley, represented in figure 6, illustrates a tremendous growth in land available for development. In late 1993, the eastern portion of the Valley was completely undeveloped; in 2007, the retail hub known as Chesterfield Commons was thriving. Within those thirteen years,

the Valley became home to over 860 businesses, employing more than 12,500 workers²⁶. That equated to a cumulative 358 percent growth rate.

The theory worked. Capitalistic financial injections in the wake of disaster not only rekindled the city of Chesterfield, they propelled it to become the largest suburb west of St. Louis and one of the most profitable suburbs in the state of Missouri. Most importantly, with 47,000 residents and counting, the city continues to serve as a model for community building and sustainability. As its website boasts: “[This city is] an example of what can happen when residents, civic and business leaders work toward a shared vision to create an outstanding community in which to live, work, and play”.

While a portion of the expansion might be attributed to a natural growth pattern associated with increases in consumer spending, the actual physical building and development of retail locations never would have occurred in such a short period of time without the guarantee of flood protection provided by the five hundred-year levee. Additionally, the Boone’s Crossing exit off Highway I-64 promoted an exponential increase in consumer traffic. By designating the Valley as a TIF district, the city gained the confidence of big box retailers such as Wal-Mart, Home Depot, and Target, among many others, whose willingness to build in the Valley drew more businesses to the area. Even after the TIF benefits expired, more and more businesses came. Two major outlet malls, each with over 150 stores, moved into the Valley. New recreation and sports complexes brought baseball, soccer, football, hockey, and golf, along with all the

²⁶ Shapiro, Mary. December 12, 2007. “City Ends Valley TIF District 10 Years Early.” Stltoday.Com. Accessed April 21, 2019. https://www.stltoday.com/suburban-journals/city-ends-valley-tif-district-years-early/article_9e666eb0-4456-5a0a-909c-e03207f5e1a3.html

restaurants that supported these establishments, all of which reinvigorated a sense of community within the city.

A significant portion of the Valley's success and growth came directly from the communal improvements made in the post-development and post-TIF phase of the project. Atop the five hundred-year levee, a ten-foot-wide walking and biking trail wound around the entire length of the levee²⁷. The paved trail promoted health and fitness and became a positive symbol of the Valley reconstruction project, namely a physical reminder of the choice to raise the levee itself. Moreover, the new sense of flood security provided by the levee greatly influenced the construction of the Chesterfield Sports Complex, a massive plot of land north of Highway I-64 encompassing over twelve baseball fields, fourteen multi-purpose fields and twelve practice baseball/softball fields²⁸, along with batting cages, concessions, and a beautiful baseball field for children with disabilities. The sports complex also provided municipal tax revenue.

In essence, the city focused on both economic and municipal growth. In 2000, developers built a golf course next to an air field that had been underwater seven years earlier. As youth sports rose in popularity, other complexes sprouted throughout the Valley. "The largest was a nearly \$75 million proposed project to build a nonprofit youth sports megaplex, backed by St. Louis Cardinals manager Mike Matheny and the nonprofit executive Dan Buck"²⁹. These types of corporate partnerships became common. Typically, towns focus on either economic or municipal growth; rarely do they encourage and help broker partnerships that elevate both.

²⁷ Chesterfield City Planning Presentation. Produced by: Mike Geisel, Slide 72.

²⁸ "Chesterfield Baseball & Softball Association > Home." n.d. Accessed April 21, 2019. <https://cbsasports.com/>.

²⁹ Heffernan, Brian. 2016. "How Chesterfield Valley Went from Underwater to under Contract." December 15, 2016. <https://www.stlmag.com/api/content/d7fdabb4-bd6a-11e6-a678-0aea2a882f79/>.

Today, Chesterfield is the wealthiest city in the State of Missouri with an annual median income of over \$100,000. The transition from a newly-incorporated city, to a flood-stricken wasteland, to one of the most desirable places to work and live took only seventeen years. The city's Chamber of Commerce defines the Valley as, "the region's retail mecca. Chesterfield Commons, the two-mile mega shopping center of the Valley, features wide, landscaped thoroughfares, ample parking, big-name stores, fine dining, fast food and a 14-screen megaplex cinema"³⁰. The Valley makes the city, from the highway access built through Tax Increment Financing, to the focus on healthy lifestyles and recreation cultivated through municipal and corporate partnerships. Additionally, the proximity to St. Louis city, a twenty-five-minute drive from the Valley, makes the trip to Busch Stadium or a night out at the Fox Theatre just an average Saturday night to the residents who call Chesterfield their home.

An argument can be made that even without the flood of 1993, Chesterfield would still have grown exponentially given the '90s economy and the social capital of its residents, and it is a valid argument. The city is situated near downtown St. Louis; it has great public schools and a younger working population. Nevertheless, the flood catalyzed officials to move beyond the status quo. The natural disaster that destroyed homes, businesses, and people's livelihoods fueled the state's declaration of Chesterfield as a TIF district. And the tax revenue from TIF encouraged developers to stand in unison with city officials, knowing their return on investment would be huge down the road.

The growth of Chesterfield Valley and the entire city never slowed. Companies and consumers poured into the district with long-term investments and thick wallets. From the initial

³⁰ "SHOP in Chesterfield - Chesterfield Chamber of Commerce, MO." n.d. Accessed April 21, 2019. <https://www.chesterfieldmochamber.com/shop-in-chesterfield>.

pledge of \$1 million from the municipal government through the \$72.5 million generated by TIF for added infrastructure, all the way to Mike Matheny's financial backing for the mega sports complex, the Valley keeps growing. The city takes pride in what it has accomplished: building and maintaining a strong levee, with its accompanying roads and bridges, as well as a solid, proactive preparation for that five hundred-year flood yet to come. In 2007, the state disbanded the Chesterfield Valley TIF district, ten years ahead of schedule.

Success begets success. Due to its continued community involvement and the Valley's ahead-of-schedule completion, "the Rockwood School District will begin receiving about \$6.6 million in additional funds annually, and the Monarch Fire Protection District will get an increase of about \$1.49 million per year"³¹. "Chesterfield itself will receive \$610,000 annually from sales tax revenue and utility tax revenue... the city's capital improvement sales tax fund will grow by about \$1.1 million per year and its parks sales tax fund now will grow by about \$1.375 million annually"³².

The entire Midwest suffered catastrophic damage from the flood of '93; hundreds of levees failed, fifty people died, and total damages reached almost \$15 billion³³. But in Chesterfield, Missouri, a community came together to rid the area of flood waters, repair the existing levee and revitalize a devastated community. The decision to declare Chesterfield Valley a Tax Increment Financing district became the single, most important decision that

³¹ Shapiro, Mary. December 12, 2007. "City Ends Valley TIF District 10 Years Early." Stltoday.Com. Accessed April 21, 2019. https://www.stltoday.com/suburban-journals/city-ends-valley-tif-district-years-early/article_9e666eb0-4456-5a0a-909c-e03207f5e1a3.html.

³² Ibid

³³ US Department of Commerce, NOAA. n.d. "The Great Flood of 1993." Accessed April 21, 2019. https://www.weather.gov/dvn/071993_greatflood.

jumpstarted the city's entire recovery and redevelopment into a model for economic and community sustainability. Money generated through a consistent increase in land valuation enabled the construction of the five hundred-year levee, as well as water management systems and highway access points. The three combined to create a sense of development security that had been lacking prior to 1993. Developers flocked into the Valley, and a two-mile economic stronghold fueled not only the city's growth but also growth in the greater St. Louis County.

After twenty-six years, the city of Chesterfield continues to prosper. Capitalism in the wake of a natural disaster proved its merit. Economic experts like Kevin Rozario and Allen Greenspan take notice of the silver lining that shines in the aftermath of disasters, and Chesterfield Valley is a textbook example of that silver lining³⁴. Today, children spend their entire youth in the Valley, from playing T-ball to participating in summer camps to enjoying team outings and birthday parties to playing slow-pitch softball or golf long after they graduate from high school. Families shop, dine, and get fit together. And the locals in Chesterfield are proud to say, "There's no place like home". If only more leaders across the nation could set their individual interests aside and apply the lesson, if you build it they will come.

³⁴ Biel, Steven. 2001. *American Disasters*. NYU Press. Pg. 72-102.

Appendix-

Figure 1: The Valley prior to the 1993 Flood. The Missouri River is at the top of the photograph.



Figure 2: Stagnant Flood Waters



Figure 3: Police Station Underwater



Figure 4: Residential Destruction



Figure 5: Airport Inoperable



Figure 6: The Valley over the course of 13 years.





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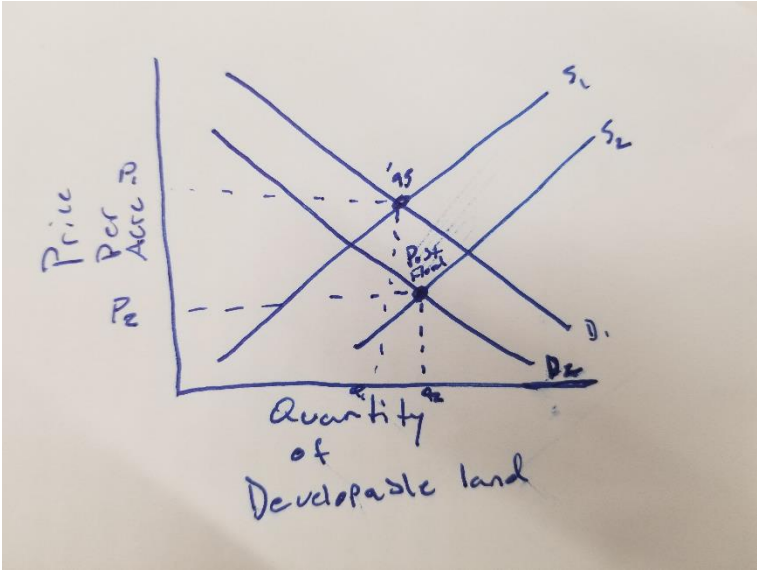
Figure 7: Annie Gunns Smokehouse



Figure 8: Citco Gas Station



Figure 9: Supply and Demand Curve Example: The increase in land available accompanied by the decrease in demand for flood ridden land, significantly reduces the per acre cost.



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