

Students Consulting for Nonprofit Organizations

German Village Society: Sidewalk Repair Initiative

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EXECUTIVE SUMMARY

On behalf of Students Consulting for Nonprofit Organizations, we would like to thank German Village Society for granting us the privilege to consult for them. It has been a compelling yet challenging experience- one that we hope impacts German Village Society to the level of which it has impacted us. By utilizing the results of our research hand-in-hand with the final documents that we have developed over the last 12 weeks, we hope to provide German Village Society and its neighbourhood with a well-founded source of direction and assistance in its greater mission of serving the good people of German Village. It is our desire and intention to continue our professional relationship going forward.

Before highlighting the results of our project cycle, we would like to briefly share some insight into our organization. Students Consulting for Nonprofit Organizations is a national organization that strives to assist in progressing nonprofit growth and affluence in local communities through the consultation of dedicated undergraduate students. We adhere strongly to our five core values: impact, quality, drive, stewardship, and volunteerism. Our particular chapter at The Ohio State University is composed of 55+ committed undergraduate students, representing a diversity of majors. Last spring we were honoured with Fisher College of Business's *Best Application of Business Skills* award for the fifth consecutive year. We constantly aim to improve the quality of our consultants and services to be of the highest caliber.

Our consultation was called for to contribute to German Village Society's prioritized sidewalk repair initiative by ultimately providing documents and guidelines of support. This includes but is not limited to the marketing behind the initiative, grant support, fund maintenance, and a sustainable financial system. In order to gain a well-defined understanding of the general sidewalk conditions within German Village, we conducted two field studies by using resources provided to us by German Village Society, advice from distinguished Fisher professor of Marketing and Logistics Dr. Rob Smith, and criteria in line with the Columbus City Code. From the combined results of our two field studies, we have determined, amongst other findings, that:

- Commercial sidewalks are in much better condition than residential sidewalks
- 75% of the properties surveyed have brick sidewalks

With this in mind, we decided that it would be most effective to narrow our target audience to residential property owners with brick sidewalks around high traffic areas. This will be discussed in further detail in the Marketing chapter of our report.

We have created a tool that can allow German Village Society to estimate the cost of repairing the sidewalks in any given neighborhood only by knowing the number of houses in that neighborhood. We found that the total cost to repair sidewalks would be approximately \$275 per household in that neighborhood, with German Village Society providing approximately \$125 of that total for each house. This tool is an important method of estimating future costs before taking on a segment of houses to target for repair. In order for German Village Society to fund these repairs, we recommend that German Village Society implement a grant system to assist homeowners in financial need. The money from this

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grant system will be raised by a combination of expanding German Village Society's existing corporate sponsorships, individual donations, and by applying for a list of specific grants that are outlined further in this report.

We have constructed several presentable visuals and documents in order to educate, clarify, and help walk residents through the proper courses of actions in repairing their sidewalks. These visuals include flyers that can be distributed to homeowners throughout German Village.

We leave German Village Society with metrics of success in addition to a timeline of recommend phases.

GERMAN VILLAGE POPULATION RESEARCH

German Village is home to a diverse population of residents, ranging from the young professional to the retiree. The range of different backgrounds creates a vibrant culture and attractive neighborhood; it also introduces a unique challenge in community outreach and motivation.

As a whole, German Village residents spend less on household improvement – for every \$100 an average American spends, a German Village resident spends \$93¹. The reason for below-average spending is an interesting one - the average household income in German Village in 2013 was \$56,000 – well above the national average of \$50,000. While the overall income of residents is high, so too is the number of renters. Over half of German Village residents rent, suggesting that a clear disconnect between what landlords are willing to pay for and what should be repaired.



¹ <http://www.point2homes.com/US/Neighborhood/OH/Columbus/German-Village-Demographics.html>

THE PROBLEM

German Village sidewalks have deteriorated over time due to a lack of large-scale repair projects, leading to tripping hazards and unaesthetically pleasing appearances. The current sidewalk conditions take away from the beauty and tradition of German Village, the attractiveness of businesses, and home resale value. Our group has prepared a solution to systematically repair the majority of sidewalks in German Village over a four-year period.

Before proposing a solution to the condition of German Village sidewalks, we had to first understand the magnitude of the problem. To address this, our group created and executed two field studies, focusing on the neighbourhood's sidewalk conditions, and statistically analyzed the results. The purpose of these field studies was to estimate the overall breadth of the problem without having to survey every single sidewalk in German Village.

DEFINING THE PROBLEM – FIELD STUDIES

We conducted two field studies in German Village, on October 11th and November 7th. We surveyed 147 properties, which is a statically satisfying sample to assess and estimate the sidewalk conditions in German Village. By surveying the sidewalks ourselves, we were able to view the conditions from the resident perspective, which furnished us with an emphatic assessment towards those whom we are going to target. Additionally, by collecting a significant amount of samples, we were able to elicit certain trends that will be conducive to prioritizing our strategy.

With the assistance of Dr. Robert Smith, a Statistics professor within the Fisher College of Business at The Ohio State University, we designed and organized the survey sheet with which we used to conduct our surveys (shown below). We decided to use the four standards provided by the Columbus City Code as the parameters to assess the degree of damage of the sidewalks:

1. "Patches of exposed gravel deeper than 1/2 inch"
2. "Cracks wider than 1/2 inch", "Raised lips higher than 1/2 inch"
3. "Slopes greater than 10% grade"

Quantitatively, we measured how many sidewalks met each of those criteria. Qualitatively, we established three levels of sidewalk condition classification:

1. "Good": Does not meet criteria
2. "Medium": Meets just one criterion
3. "Poor": Meets multiple criteria or doubles one criterion

For independent yet influential variables, we included the following categories:

- Type of Property
- Sidewalk Material
- Tree(s) Existence

- Further divided into “Small”, “Medium”, or “Large” tree(s)
- Closeness to Commercial Establishments

Surveyor:	Area:			Street:			Property#:		
Block:									
Type:	Business <input type="checkbox"/>			Residence <input type="checkbox"/>					
ft ² per sidewalk:				# sidewalks/house:			ft ² Damage per ft ² sidewalk:		
Sidewalk Material	Bricks <input type="checkbox"/>			Concrete <input type="checkbox"/>			Asphalt <input type="checkbox"/>		
Patches (if applicable)	Bricks <input type="checkbox"/>			Concrete <input type="checkbox"/>			Asphalt <input type="checkbox"/>		
Trees (if applicable)	Small <input type="checkbox"/>			Medium <input type="checkbox"/>			Asphalt <input type="checkbox"/>		
Vegetation Strip	Yes <input type="checkbox"/> No <input type="checkbox"/>			Distance to commercial establishments			Far <input type="checkbox"/> Fair <input type="checkbox"/> Close <input type="checkbox"/>		
damage assement	Patches of exposed gravel deeper than 1/2 inch			Yes <input type="checkbox"/>			No <input type="checkbox"/>		
	Cracks wider than 1/2 inch			Yes <input type="checkbox"/>			No <input type="checkbox"/>		
	Raised lips higher than 1/2 inch			Yes <input type="checkbox"/>			No <input type="checkbox"/>		
	Slopes greater than 10% grade			Yes <input type="checkbox"/>			No <input type="checkbox"/>		
	Condition*			Poor <input type="checkbox"/>			Fair <input type="checkbox"/> Good <input type="checkbox"/>		
<small>Good: Does not have yes. Fair: Have 1-2 yeses. Poor: have more than 3 yeses.</small>									

In avoidance of undue complexities that might undermine us reaching sound conclusions, we adopted certain assumptions to simplify the data analysis, while maintaining its stringency. First and foremost, we classified renters as homeowners, for isolating renters as an independent category would not productively contribute to our trend searching, but would, on the contrary, import unnecessary complication. Secondly, we classified and assessed trees by their size, which was determined through visual estimation due to lack of proper measurement methods; however, the internal standards of classification remained uniform. Thirdly, as mentioned above, we adopted the Columbus City Code as a means to assess the level of sidewalk damage. Lastly, the standards to determine the closeness from each residence to commercial establishments were nebulous, thus we had to roughly assess the distance through a visual means. We did so with no perfunctory manner; similar to our method of assessment for tree size, as a team we set up internally unanimous standards, which was to classify sidewalks as:

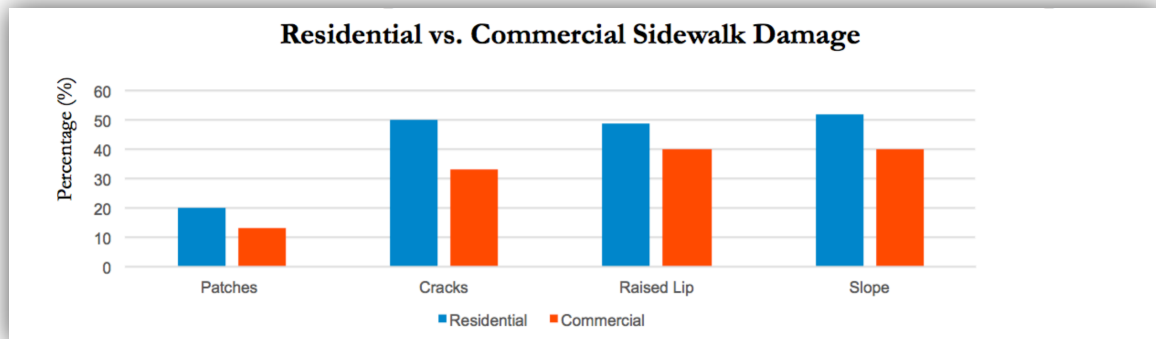
1. “Close”: Adjoin commercial establishments
2. “Medium”: Where commercial establishments were in sight
3. “Far”: All the rest

We organized and arranged our data into an Excel Spreadsheet (shown below). Quantitatively, a few essential numbers are elicited from the data we have collected, by combining the first and second field study results. First, **we averaged the number of sidewalks per residential property to be 1.5**. Then, focusing on residential sidewalks, we massed the total number of damaged residential sidewalks with each of the four parameters and dived them by the total number of residential sidewalks. By this process, we realized that, **with respect to three out of 4 the four parameters, nearly half of all residential sidewalks meet the criteria**. In addition, we calculated the average square foot of damaged residential sidewalks to be 13 square feet.

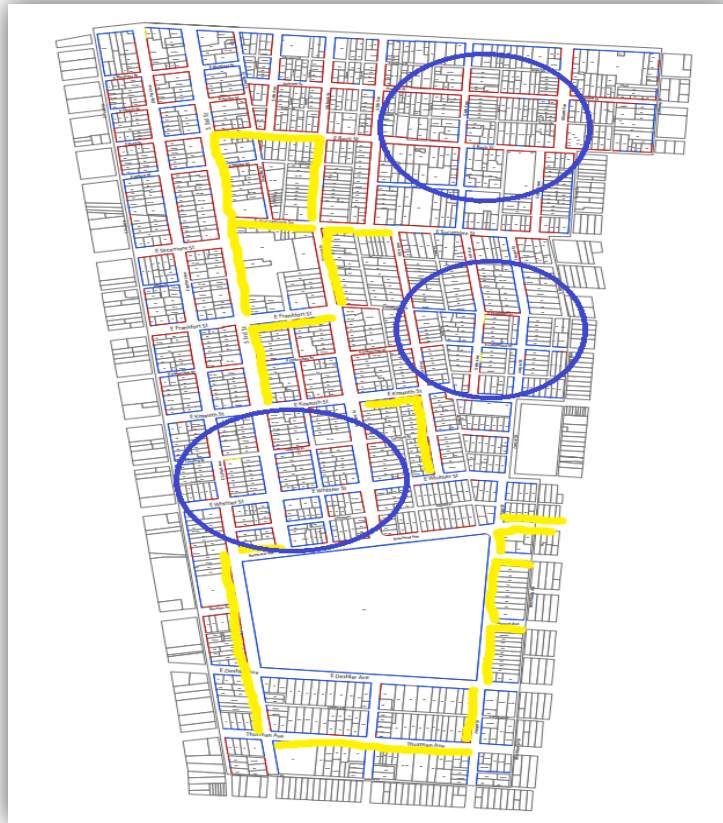
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Type	# Sidewalks/ house	ft ² damage	Sidewalk Material	Patches	Trees	Vegetation Strip	Distance to commercial establishment	Patches of exposed gravel deeper than 1/2 inch	Cracks wider than 1/2 inch	Raised lips higher than 1/2 inch	Slopes greater than 10% grade	Condition
R		6	6 B		S	Y	FAIR	N	N	Y	Y	F
R		3	6 B		M	Y	FAR	N	N	N	Y	F
R		3	0 B		M	N	FAR	N	N	N	Y	F
R		3	4 B		M	Y	FAR	N	N	N	Y	F
R		2	17 B		L	Y	FAR	N	N	Y	Y	F
R		2	4.5 B		L	Y	CLOSE	Y	Y	Y	N	F
R		2	10 B		L	Y	FAR	N	Y	Y	Y	G
R		2	B			N	FAIR	N	Y	N	N	G
R		2	B			N	CLOSE	N	N	N	Y	G
R		2	B		M	N	CLOSE	N	Y	Y	Y	F
R		2	BC			Y	CLOSE	N	N	N	N	F
B		2	C			N	CLOSE	N	N	N	N	G
R		2	B		L	Y	CLOSE	N	Y	Y	N	F
R		2	B			N	CLOSE	N	N	N	N	G
R		2	B			N	FAIR	N	N	N	N	G
R		2	30 B		M	N	FAIR	Y	Y	Y	Y	P
R		2	0 C		M	Y	FAIR	N	N	N	N	G
R		2	14 B		M	N	FAIR	Y	Y	N	Y	F
R		2	3 C			Y	FAIR	N	N	N	N	G
R		2	0 B		M	Y	FAR	N	N	N	N	G
R		2	8 C			Y		Y	N	N	N	F
R		2	8 C			Y		Y	N	N	N	F
R		2	45 B			N	FAR	N	Y	Y	Y	P
R		2	0 C		M	N	FAR	N	N	N	N	G
R		2	40 B			Y	FAR	N	N	N	Y	P
R		2	0 B			Y	FAR	N	N	N	N	G
R		2	0 C			Y	FAIR	N	N	N	N	G
R		2	0 B		M	Y	FAIR	N	N	N	N	G

Qualitatively, in regards to the independent variables that we established, we have identified several significant trends. First of all, using the Columbus City Code as our means of sidewalk damage assessment, **commercial sidewalks are in better condition than residential sidewalks**, as shown in our graph below. Further more, **the closer the sidewalks are to commercial establishments, the better condition they are in**. Lastly, **trees are detrimental to the sidewalks**; the bigger the trees are, the worse conditions the sidewalks are in.



Below is a map highlighting the streets that we covered on our culminated field studies, in addition to radiuses of coverage. In our first field study, we documented specific houses that were surveyed and marked our routes on the map (this route is shown in yellow). In the second field study, to maximize the number of sidewalks covered in a fixed amount of time, we surveyed the radiuses seen below outlined in blue without marking down our specific path.



DEFINING THE PROBLEM – AMAZON MECHANICAL TURK

Amazon Mechanical Turk is an online resource that allows for Requesters to create HITs, or human intelligence tasks. HITs consist of short surveys that workers get paid a set amount to complete, which is determined by the Requester. For the Requesters to collect data, they simply fund their account via Amazon payments, load a “task” (or short survey), and compile the results after a self-designated time period.

Our survey was first generated using Qualtrics. We then linked that same survey to Amazon Mechanical Turk. The survey consisted of four questions:

1. “If you were to trip on a damaged sidewalk and become seriously injured, how likely would you be to sue the property owner for not maintaining his sidewalk? (Given that it is the property owner’s responsibility to maintain the condition of their sidewalk)”
2. “In a recent sidewalk injury case, a man who incurred injuries from a height differential on a homeowner’s sidewalk settled out for \$63,500. The average cost to replace a brick sidewalk is \$3,500. With this new information, how likely

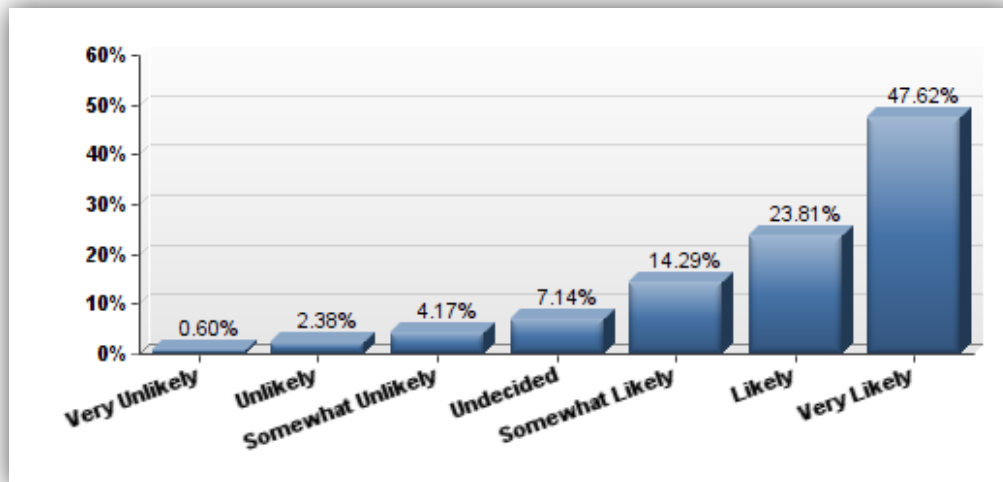
would you be to sue the property owner for not maintaining their sidewalk, if you were to trip and incur serious injuries?”

3. “Keeping the information from Question 2 in mind, from the perspective of a property owner, how likely would you be to fix your damaged sidewalk?”
4. What would be the maximum cost you would be willing to pay to replace your damaged brick sidewalk?

The purpose of the Questions 1-3 were to gauge how likely a person would be to sue a property owner from the injured pedestrian’s perspective and to fix their sidewalk from the property owner’s perspective, from both an uninformed and an informed standpoint. This comparison was done to determine whether or not educating residents about the potential risks of not repairing their sidewalk and about the actual cost of repairs would increase their likelihood to repair their damaged brick sidewalks. This survey was first created with an estimate of \$3,500 to replace a residential brick sidewalk, which was later downscaled in order to estimate what percentage of a sidewalk’s repair cost a resident was willing to pay.

The results of Questions 1 and 2 were inconclusive individually, in that there was not a single level of likelihood that encompassed more than 21% of responses. However, when comparing the results from Questions 1 and 2, the mean likelihood level for a pedestrian to sue increased from 3.71 to 4.19 (where “1” represents very unlikely and “7” represents very likely). This demonstrates that when people are aware of the cost of repair and the possibility of a high settlement amount, they would be more likely to sue the homeowner. This fact can be used as a “fear factor” in method of convincing homeowners to repair their sidewalks.

The results of Question 3 show a very clear trend from the perspective of the property owner that when educated about the potential risks, residents would be very likely to fix their damaged sidewalks, as shown in our graph below.



Question 4 served to determine an average homeowner “willingness to pay” to repair a residential brick sidewalk. Since the average cost of repair provided in the survey was \$3,500, a sum that was higher than the final decision of average cost, the results were adjusted to

reflect what percentage of the cost a homeowner was willing to pay. By standardizing the results of Question 4 based on the percentage of responses in each amount category, we were able to determine an average willingness to pay of 55%.

DEFINING THE PROBLEM – COST FUNCTION

The information from the field studies and Amazon Mechanical Turk was obtained in order to estimate, on average, how much money it would cost German Village Society to repair the sidewalks for each residential house. The equation below was derived in order to utilize the gathered information to estimate this parameter.

Cost to German Village Society (\$) =

$$\text{Margin} \times \frac{\text{Square Feet Damaged}}{\text{Sidewalk}} \times \frac{\text{Number of Sidewalks}}{\text{House}} \times$$

$$\% \text{ of "Poor" Condition Sidewalks} \times \frac{\text{Number of Sidewalks}}{\text{House}} \times \frac{\text{Number of Houses}}{\text{Target Area}}$$

$$\text{Margin} = \text{Cost to Replace/Install Brick} + \text{Cost of Tree/Root Removal} - \text{Resident Willingness to Pay}$$

The primary target of German Village Society will be residential sidewalks in “poor” condition. By utilizing the equation above, along with values of each of these parameters, the average cost to repair sidewalks per house for German Village Society is **\$125**. This number can be used to estimate the cost of repairing sidewalks in a given zone only by knowing the number of houses in that zone. For example, applying this number to a theoretical street of 20 houses, German Village Society should plan on providing \$2,500 for the repair project, even though we estimate that approximately only six houses on that street will need their sidewalks repaired. The average contribution that German Village Society should expect to make to each of these houses whose sidewalks are in critical need of repair is approximately \$400.

SOLUTION

In order to facilitate the repair of the neighbourhood sidewalks, German Village Society will establish a grant system to assist residents who cannot afford to pay for all of or part of the sidewalk repair. The money required for this grant system will be acquired through German Village Society's traditional methods (corporate sponsorship, membership dues, etc.), as well as from grants.

Residents who submit an application for financial assistance for their sidewalk repair can utilize the grant system. Said residents will submit an application roughly based on the questions found in a traditional FAFSA form, giving German Village Society income information about the resident. Residents whose need is established and proven will be provided either complete or partial financial assistance based on their respective level of need.

The proposed method of allocating funds once a grant or other resource is obtained is an application similar to Free Application for Federal Student Aid, or FAFSA. These forms are a method established by the federal government used as a guideline for financial aid eligibility regarding college students and higher education. An online FAFSA form can be found in the footnote below². The purpose of this form regarding German Village Society is to present a clear resident need to streamline decision-making when allocating funds. The application for German Village Society will be similar to the FAFSA form because of the similar information required to complete it and the confidential method of dealing with the associated information. This application can be available to members of German Village via German Village Society's electronic newsletter, the German Village Gazette, and German Village Society official website. This application would be clearly advertised as a method of aiding residents in need of a subsidy to repair sidewalks.

While some residents may require more than others, as a whole, the average aid from German Village Society should converge on **\$125 per house**. It should be noted that this value incorporates houses whose sidewalks are not damaged. Isolating only houses that are damaged/will require repair (and thus are likely to submit an application for financial assistance), German Village Society should expect to pay out on average **\$400 per house**.

In order to financially facilitate this proposed grant system, there are several avenues to explore in respect to applying for grants. These organizations show a similarity to German Village Society and are likely to provide adequate financial resources. Three potential avenues were selected as the most beneficial entities to invest time into applying. Each grant requires an application that entails a summary of the problem, a budget, statistics regarding the existing sidewalks, and a timeline for a potential solution. These grant components can be compiled from information found in the subsequent report that outlines the information our team has gathered.

One option to acquire funding for the sidewalk repair initiative is the National Trust for Historical Preservation, for they are one of the largest organizations of their kind whom fully

² <https://fafsa.ed.gov/fotw1415/pdf/PdfFafsa14-15.pdf>

support historical conservation-based projects. Funding is awarded to nonprofit organizations and public agencies. The National Trust for Historic Preservation has awarded over one million in grant funding to almost 200 various projects nationwide. Grants from the National Trust are awarded annually in three cycles throughout the year.

A second applicable prospect to receive funding is Preservation Ohio, an organization that focuses on helping preserve historical areas in Ohio. This association is a strong endorser of historical preservation-based projects and initiatives, and presents the possibility of a more long-term funding possibility. Preservation Ohio does not focus on grants; rather they are an organization highly concerned with the well being of historically prevalent areas around Ohio and are a suitable candidate for aid.

An additional option is to pursue the previous funding that German Village Society has received in the past, but this time petition for funding that would apply to the sidewalk repair initiative. The funding was received through the Central Ohio Area Agency on Aging, an organization that focuses on aging and disabilities in the central Ohio or Columbus area. An integral aspect of the sidewalk initiative is to allow for a greater mobility for the elderly residents of German Village Society. This grant possibility also provides the stability of having received funding in the past, and the Central Ohio Area Agency on Aging understanding the ultimate goals behind the German Village Society's mission.

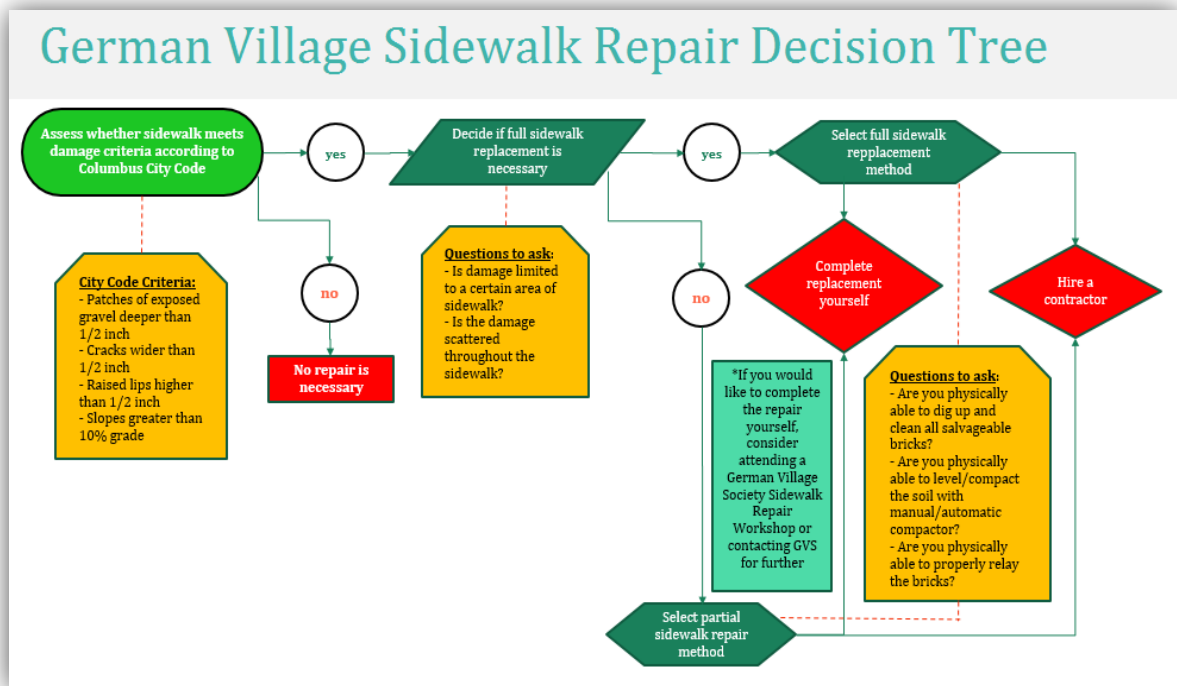
REPAIR METHODOLOGY

As part of our proposed methodology in restoration of the German Village sidewalks, we conducted expedient research on the proper procedures one should take towards repairing the curbs of a sidewalk. The curbs are in fact the city's responsibility to repair. We have prepared a detailed step-by-step instruction that residents can follow in aim to getting their sidewalks fixed. This would not only augment the awareness among the residents, but also help to facilitate the curb fixing process:

1. Contact the Department of Public Service Permits Section at (614) 645-7497 prior to starting any curb work.
2. Send an application via e-mail to ColsPermits@Columbus.gov or via mail to *Department of Public Service Permits Section, 50 West Gay Street, Columbus, Ohio 43215*, including one's name and address, daytime telephone, and address of damaged city curb.
3. City personnel inspects curb prior to removal in order to qualify for reimbursement program.
4. City personnel notifies property owner of the inspection results and if the damaged curb qualifies for reimbursement program.
5. If approved, one should hire a *bonded and licensed contractor* and arrange for the work to begin. One must have obtained a no-cost permit at *50 West Gay Street* prior to starting any work.
6. Pay the contractor in full for the job, and then provide the city with a copy of the receipt or other proof of payment. The city confirms all the required information has been submitted and arranges for a final inspection.

7. Reimbursement is processed. If the repair/replacement is approved, then a check will be sent to respective homeowner. Normal reimbursement time is 4-6 weeks. Current reimbursement rate is \$32.00 per lineal foot of approved curbing. This rate is evaluated from time to time and adjusted to stay in line with the industry standard.

The decision tree below functions as an aid to residents in deciding whether or not their brick sidewalk should be repaired, and whether or not they should attempt said repair themselves. The decision tree serves as a rough outline and provides several specific parameters that should be considered when contemplating both partial or full sidewalk replacement. It also shows homeowners that they can reduce the cost of repairing their sidewalk by performing the labor themselves, if they are able, which will further convince residents to make the necessary repairs.



MARKETING

German Village Society's goal is to generate motivation within the residents of German Village to repair their sidewalks. German Village Society will focus on residential property owners with brick sidewalks around high traffic areas.

The following is a Strengths, Weaknesses, Opportunities, and Threats (S.W.O.T.) analysis our team erected in purpose of grasping all variables in the construction of the marketing strategy:

S.W.O.T.

Strengths:

- German Village Society's established reputation
- Strong overall unity throughout the German Village neighbourhood
- Key pre-established relationships (brick supplier, tree removal city worker, etc.)
- No competitors

Weaknesses:

- Potential financial burden of executing such a project
- Wide range of residents to educate and market towards
- Having to "win over" residents

Opportunities:

- Use creative methods to reach out to residents
- Surprisingly lower than anticipated costs associated with sidewalk renovation

Threats:

- Financial implications, both on the residents' end and on G.V.S.'s end
- Inconvenience factor
- The fact that renovating one's sidewalk is optional; this is not something G.V.S. is stressing *must* be done, rather it *should* be done

Marketing Strategy

German Village Society's strategy will be based on communicating the initiative for residential homeowners within the German Village neighbourhood to repair their sidewalks. If the resident population of German Village can be educated on the essential facts and figures of this topic, they will be motivated to repair their sidewalks. *Educate, Inform, and Demonstrate.*

The first method of communicating this information will be through flyer distribution. Concise and visually appealing flyers will be dispersed amongst the residential properties throughout German Village. These flyers will be positioned at the respective property sites, whether that be in door handles, in mailboxes, in car windows, etc. Additionally, these flyers will be placed in local community gathering spots that generate significant neighbourhood traffic, such as cafés and recreational centers. These flyers will serve as a means to *educate* the target audience – they will do a caliber job in informing the receiving audience of the safety

and financial risks of damaged sidewalks, as well as emphasizing the sustainable and affordable aspects of renovating brick sidewalks. Below are two flyers that we have designed.

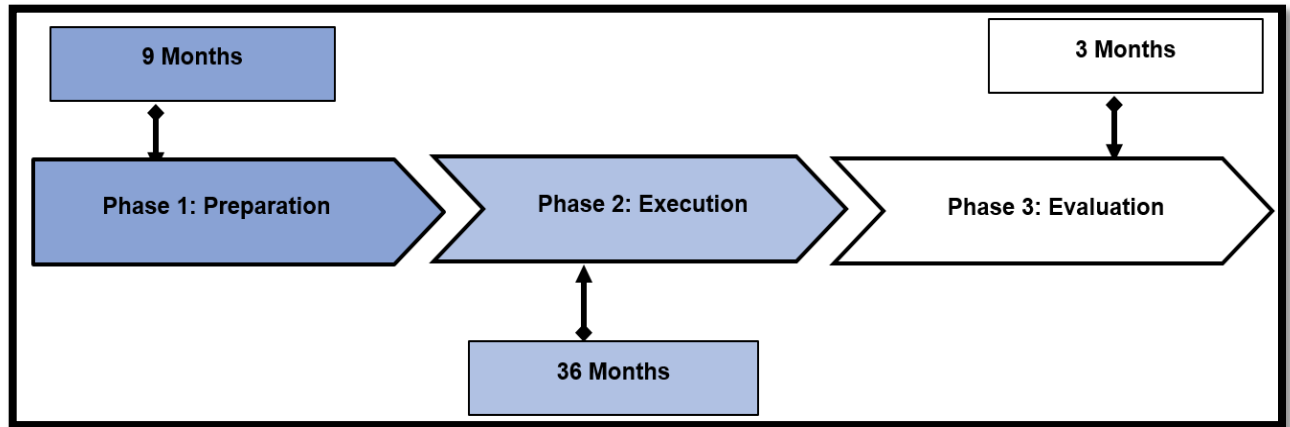


Through the continuation and expansion of the sidewalk repair workshops, the residents will be *informed* of the process that entails sidewalk repair. These explanatory workshops will resume in educating the German Village population on how to properly repair one's sidewalk. In addition, these workshops will bring various homeowners together, naturally strengthening the community dynamic. We encourage the enlargement of these workshops, by holding them with more frequency throughout the year as well as opening them up to more volunteers.

By posting an informative video, this will serve to *demonstrate* how one can go about repairing his sidewalk. This video will be easily accessible to the residents of German Village, for it will be shared on German Village Society's official website and German Village Gazette, as well as the weekly electronic newsletters. A link to the video can additionally be placed on the informative flyer, directing the audience towards this electronic resource.

IMPLEMENTATION

To facilitate the introduction of this repair strategy, the initial “trial” project will be broken up into 3 distinct phases, as shown below.



In the Preparation phase, German Village Society will procure funding for a relatively small-scale “trial” of the proposed system methodology. German Village Society will secure this funding either in form of payment or pledged future payments. The variety of grants outlined in this report should be coupled with money from existing sponsors or new corporate sponsors who donate for the purpose of sidewalk renewal. Besides finances, German Village Society will also reach out to their partner landscaper and brick companies and coordinate for an increase in demand from German Village residents when the Execution phase begins.

In the Execution phase, German Village Society will look to make a clear and obvious visual statement to both residents of German Village as well as general visitors that a sidewalk repair overhaul is in process. To do this, they will choose areas of German Village that are most noticeable and also in most need of repair – residential houses on main streets. We estimate that the total number of such houses is approximately 200 – by utilizing the equation explained in this report, a 200-house neighborhood repair initiative should cost around \$25,000 for German Village Society for repair. From our field studies, we expect that the total number of houses’ sidewalks that will be repaired in this 200-house segment will be approximately 65. We further expect that this phase will take approximately three years (36 months), equating to roughly 20 houses’ sidewalks repaired each year. German Village Society will reach out to and motivate residents through marketing initiatives detailed in the previous section.

In the Evaluation phase, German Village will pause from its repair projects and evaluate how the execution phase was carried out. Metrics for success are outlined in the next section.

METRICS OF SUCCESS

In the Preparation phase, we believe that German Village Society should have the full expected cost of \$25,000 collected and/or pledged. Since German Village Society's resource/attention will be focused on sidewalk repair during the Execution phase, we believe that it would be dangerous to begin the trial initiative without solid sources of funding.

In the Execution phase, we believe that German Village Society should be able to repair at least 85% of the sidewalks with a "poor" classification in the 200-house sector of residents living on main streets. We leave a 15% room for error due to unexpected costs incurred during either the Preparation or Execution phase, homeowners who outright refuse to repair their sidewalks, or time challenges in repairing this many sidewalks in a three-year period.

In the Evaluation phase, German Village Society will answer 3 principal questions in regards to this proposed repair system:

1. Will German Village Society continue with this repair system/are there any additional sources of funding/community support from the attention the trial phase brought?
2. If so, will German Village Society stay with their current partner brick supplier & landscaper sponsors?
3. If so, what area of repair will German Village Society choose to target next?
Examples could include residents with "fair" sidewalk classification along main streets or residents with "poor" sidewalk classification in a less-trafficked section of the neighborhood.

When picking the next area for repair, we highly recommend that German Village Society target one sector of residents at a time. The purpose of this approach is not only to make the success of a repair initiative very clear to residents (i.e. a resident walking along that street is less likely to notice if only half a street is repaired rather than an entire neighbourhood), but also to create an efficient and clear logistical operations for eventually repairing the majority of sidewalks in German Village.

VALUE ADDED/CONCLUSION

We believe that the good people of German Village will benefit from this sidewalk repair initiative through the increased walkability and mobility of the German Village neighbourhood, greater community comradery, and the enhancement of the general beauty and aesthetic neighbourhood appeal.

Through the culmination of our work, we provide German Village Society with instrumental resources in line with their sidewalk repair initiative, which we hope contributes to the higher value of their mission. Thank you once again for partnering with Students Consulting for Nonprofit Organizations.