

Portage Creek Corridor Reuse Plan



Submitted to:

City of Kalamazoo, Michigan

Submitted by:

The Corradino Group of Michigan, Inc.

The Portage Creek Corridor Reuse Plan was adopted by the City Commission on April 20, 2009.

Executive Summary

Overview

Over the last two decades the Portage Creek area south of downtown Kalamazoo has devolved from a thriving industrial location with an emphasis on the paper mill industry to a blighted, largely abandoned area that is in the middle of two Kalamazoo neighborhoods – Milwood and Edison – that are home to thousands of Kalamazoo residents.

The Portage Creek Corridor Reuse Plan is important to the City of Kalamazoo, the residents of the Milwood and Edison neighborhoods, and to those in the region who may benefit from new jobs, housing, or recreational opportunities in the Portage Creek Corridor (Figure S-1).

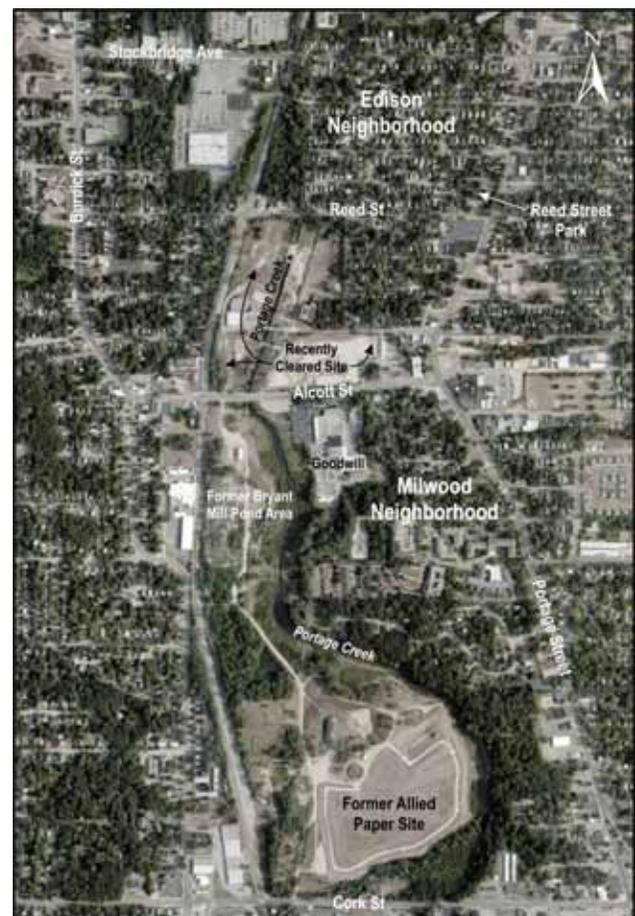
In May 2007, the City of Kalamazoo retained The Corradino Group of Michigan to prepare the plan. The planning process included outreach to the community and coordination with ongoing analyses being conducted by the United States Environmental Protection Agency (EPA) of the former Allied Paper Superfund site. This coordination included participation by the consultant team at information meetings and presentations held by EPA and also be inclusion of information developed by the consultants in some of EPA's planning work conducted by its consultant – E².

The plan was prepared with the support of a Steering Committee, which provided input throughout the process.

The planning effort involved the following tasks:

- Task 1: Determine Environmental Feasibility;
- Task 2: Perform Generalized Market Analysis;
- Task 3: Conduct Public and Stakeholder Involvement; and,
- Task 4: Develop Portage Creek Corridor Reuse Plan.

Figure S-1
Portage Creek Corridor

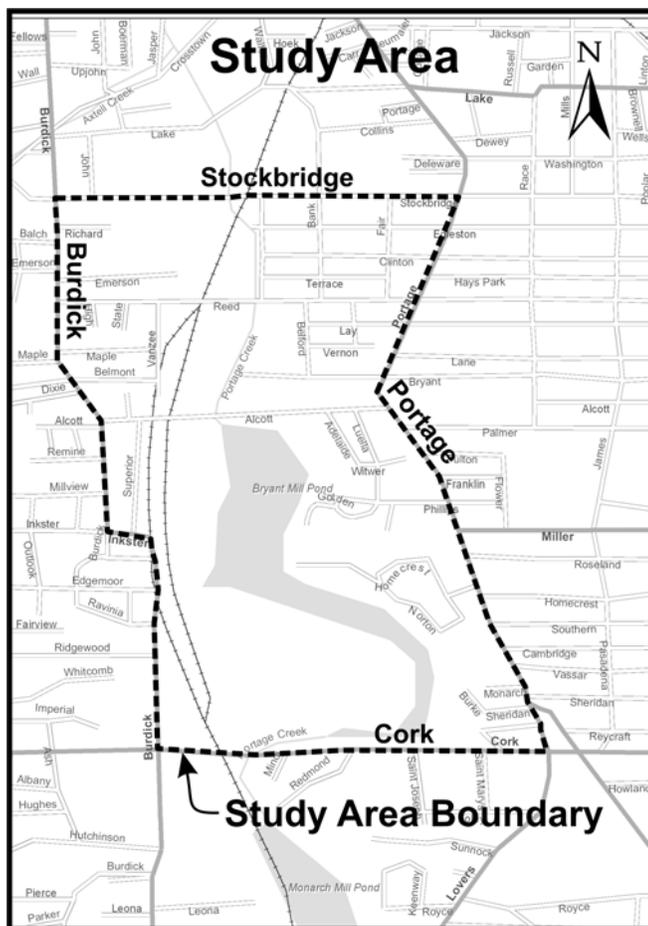


This study process included three public input sessions. These input sessions, combined with the findings of the environmental analysis and the market study, formed the basis for the reuse plan. In addition to the public input sessions, the consultant team worked closely with City staff, including representatives of Community Planning and Development Department, the Kalamazoo Brownfield Redevelopment Authority, City officials, and community leaders in development of this reuse plan. The draft plan was completed in December 2008 and submitted to the City Planning Commission and Council in early 2009.

Environmental Issues

A basic planning factor in the reuse plan is the environmental condition and viability of many of the properties in the study area (Figure S-2). Basis for that assessment was a report entitled *Existing Conditions Report* prepared by Fishbeck, Thompson, Carr & Huber, Inc. (FTC&H).¹

Figure S-2
Project Study Area



¹ *Existing Conditions Report*, Fishbeck, Thompson, Carr & Huber, Inc., prepared for the City of Kalamazoo, 2008.

Thirty-three sites, ranging from quarter-acre size lots to the 95-acre Allied Paper property (which is the largest single tract in the study area), were examined in the analysis. These sites were included in the analysis, regardless of size or current land use, because they had known or suspected environmental contamination issues.

More than 100 acres in the southern part of the corridor (the Allied Paper and Panelyte properties) have soil and groundwater contamination from polychlorinated biphenyls (PCBs) and other contaminants. PCBs have also been detected in surface water, sediments and fish tissue from Portage Creek. These properties are being investigated and remediated by Michigan Department of Environmental Quality (MDEQ) and the Environmental Protection Agency (EPA). According to the Existing



A view of Portage Creek.

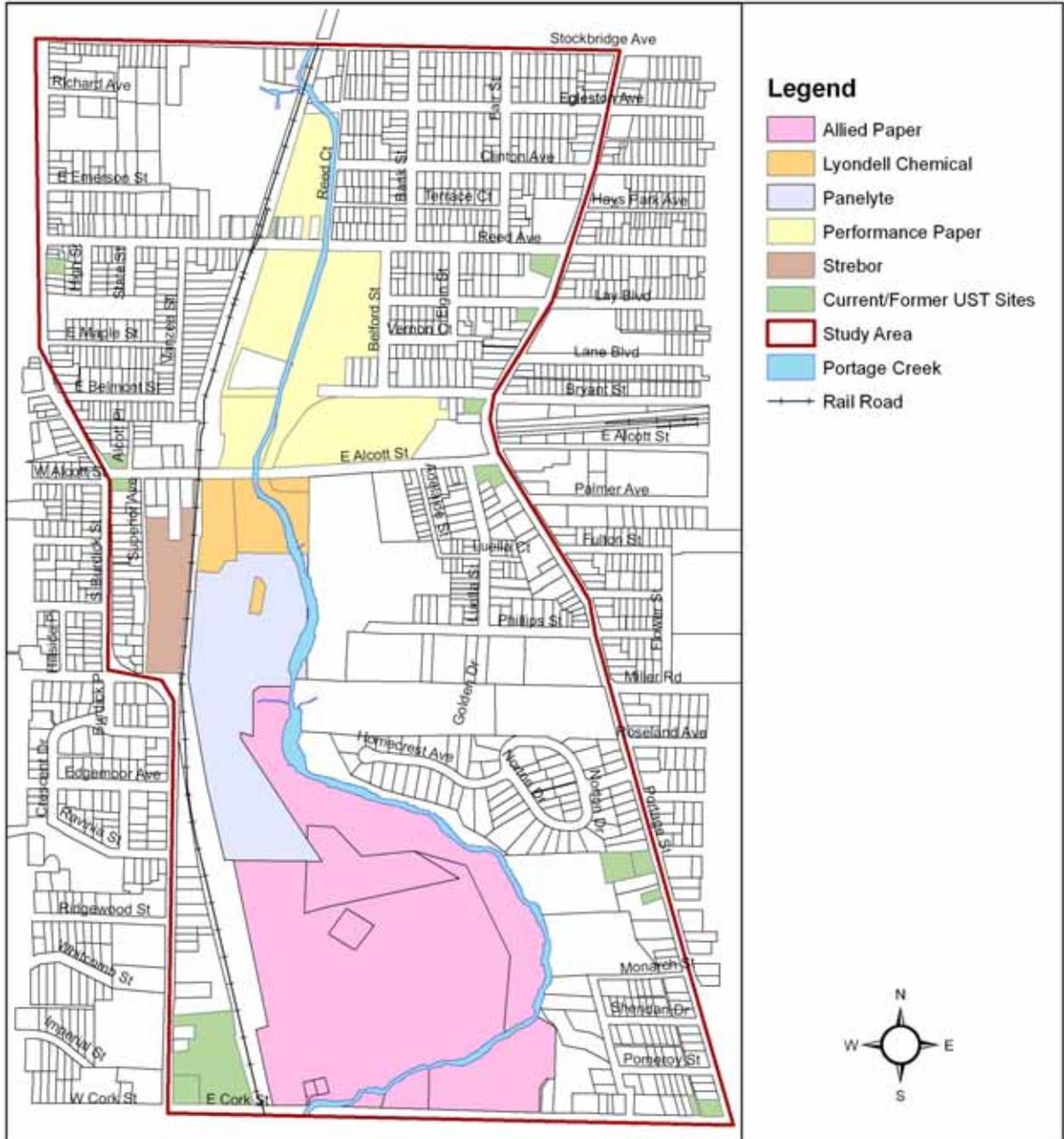
Conditions Report, these properties have a low potential for residential, commercial or industrial land use. The Allied Paper site is part of the Kalamazoo River Superfund project and is referred to as Operating Unit (OU) 1. The Environmental Protection Agency (EPA) is conducting a separate planning process to determine the viability of potential future land use on the Allied Site.

The City owns or is in the process of acquiring several sites in the area, including the Performance Paper site and the Panelyte property. Figure S-3 presents an overview of the properties.

Nearly half of the other sites examined in the study area are current or former underground storage tank (UST) sites and include four active gas station sites and ten former gas station sites. These sites are typically half-acre lots or smaller and are located on the periphery of the study area along the mostly-commercial arterials (Portage, Cork and Burdick Streets). A few of these are known leaking UST (LUST) sites that are currently being addressed by parties under MDEQ oversight and at least two of these sites have land use restrictions and/or groundwater use prohibitions. The report indicates that the highest potential use for these sites is commercial, and that use of these sites for residential use would require a high level of effort to assess and/or clean up. These sites are generally too small for industrial use and conversion to green space would remove them as tax revenue sources.

In summary, from an environmental standpoint, the study area has imposing, but not insurmountable challenges to future development. The most significant of these is the cost of dealing with environmental issues. Nevertheless, the City has an incredibly vibrant Brownfields program that has dealt with similar issues. A vision for the area should not be governed by cost considerations alone.

Figure S-3
Map of Key Properties



Market Study

The Portage Creek Reuse Plan has been developed during a period of recessionary activity. Housing foreclosures, job losses, volatile gas prices, have all contributed to an economy in which businesses and individuals alike are retrenching, spending less, and forgoing major expenditures on items such as automobiles and homes. To conduct the market analysis, the consultant examined the market attraction of an area encompassed by a two-mile radius of the study area, called the planning market area. Because the study area is one of the few undeveloped tracts of land in Kalamazoo, it is not unreasonable to think that development spurred by the population and business surrounding it could be focused on the study area.

Redevelopment of the Portage Creek area will be a long-term project and be directly proportional to job growth. Between 1990 and 2000, approximately 22,000 net new jobs were created in the HMA. However, no new net jobs were created in the current decade to date. Given today's economic situation, it is difficult to determine what the future holds for the region's economy. Planning for the area must be based on some historic level of job growth. It would be extremely optimistic to assume that 20,000 jobs would be created in the next decade as were created between 1990 and 2000. Conversely, it would be highly pessimistic to assume no new jobs would be created. Looking at past job growth, a median number of 10,000 jobs is rational as a basis for planning purposes.

If an assumption is made that a level of 10,000 net job growth can be generated by Kalamazoo-Portage HMA over the 2010 to 2019 time frame, this could translate into demand for approximately 630 housing units that could be developed in the HMA. The distribution of these housing units will be about 40 percent rental housing and approximately 60 percent for-sale housing. Assuming an aggressive 25 percent capture of this housing by the planning market area, approximately 170 housing units would be needed, many of which could be developed in the immediate project study area. This historic average estimate of job growth will create demand for housing, retail, industrial, office, and associated infrastructure requiring approximately 30 acres (Table S-1) in the planning market area, which also could be focused in the immediate study area.



The Edison neighborhood has a strong neighborhood association but has challenges that will have to be addressed to create an environment for economic development and enhancement.

Table S-1
Development Land Requirements

Multi-family housing @ 15 units/Ac.	4.50 Acres
Single family housing @ 7.9 units/Ac.	12.90 Acres
Retail \$300/SF Sale	1.41 Acres
Office \$200/SF Job	4.70 Acres
Light industrial	6.49 Acres

Source: Integra Realty

This excludes the portion of the study area that will not permit construction either due to physical constraints or environmental issues. This latter will create the parks and open space area which are anticipated to create an attractive park-like setting, enhancing the appeal of the study area.

The analysis in the market study report presents a possible opportunity for the study area for real development. The remaining question is whether the opportunity is realistic. To assess that, representatives of Corradino conducted a series of one-on-one interviews with public and policy officials and private sector interests, including community leaders, members of the planning commission, developers, and citizens interested in the Portage Creek Reuse Plan. The focus of those interviews was an assessment of the market possibilities for complementary redevelopment of vacant portions of the study area.

A series of common themes emerged from these discussions. Nearly all people interviewed identified not only the immediate study area but the surrounding neighborhoods – Edison, Millwood, Westnedge Hill, and Vine – as being important to this process of complementary redevelopment. There was concern about the image of the area, particularly Portage Street, as being a negative factor that could impact or limit future development opportunities. There was universal recognition among those interviewed that the green space opportunities in the area were positives that could result in attractive amenities to enhance and incent both residential and industrial/commercial redevelopment. It was apparent through the conversations that the possibility of development activities was unlikely in either the residential or commercial market without significant public push, support and incentive.

Public Involvement Process

The consultant conducted a thorough public outreach process for the study. Three public meetings were held:

- June 24, 2008
- August 12, 2008
- December 2, 2008

For each of these meetings a variety of techniques was used to notify the public of the



The public meetings were held in the meeting room of the Edison Neighborhood Association.

meetings. These included distribution of flyers throughout the neighborhoods, a technique known as Robocalling, which involves random dialing of phone numbers in a select area and playing a pre-recorded message; and press releases to the local media. All the information for meeting notices and the robocalling was in English and Spanish. In addition to these meetings, the consultant made presentations to groups such as the Kalamazoo City Environmental Concerns Committee and the Milwood Business Association.

Throughout the public input process several themes emerged. People expressed continuing appreciation for the natural beauty of the area. People also expressed concern about neighborhood issues – infrastructure, housing, crime, etc. As shown in the preferences section, people supported open space concepts but also were concerned about jobs and economic development for Kalamazoo.

Alternative Land Use Scenarios

As part of the planning process, four distinct land use scenarios were created. These evolved from the basic existing conditions in the study area and the analyses and public input developed during the study. As can be seen in Figure S-4, the study area is currently a mixture of residential, vacant industrial, marginal concentrations of interior commercial, and scattered neighborhood-level commercial activity on the fringes.

The vacant industrial area south of Alcott Street is predominately comprised by the former Allied Paper site, which is now an EPA Superfund Site known as Operating Unit (OU) 1. The city has control of the former Panelyte site, which is just south of Alcott Street and west of the OU 1 site and comprises about 22 acres. The city also has control of the former Performance Paper site, which is just north of Alcott Street and comprises approximately 27 acres. In addition, just to the north and west of the Performance Paper site is a privately owned site on Stockbridge with 14 acres. Although this site is in private ownership it has been mentioned as a possible property to join with the city holdings in the area. Together, these parcels represent the core set of properties that could be readily focused upon for development to serve as a catalyst for long-term revitalization and reuse in the Portage Creek corridor. It is believed that combined with the investment in the Portage Creek Trail, investment in the bountiful open space extent in the area, and the eventual development of the Allied Paper site into a community resource, that development can occur such as has occurred on in the Riverfront and Northside neighborhoods that will have very positive results. To identify what type of development activities should be focused on in the corridor, a number of alternative scenarios were developed. These included:

- Scenario 1: Open Space Focus;
- Scenario 2: Residential Focus;
- Scenario 3: New Urbanist/Mixed Use Focus; and,
- Scenario 4: Commercial/Light Industrial Focus.

Figure S-4
Existing Land Use

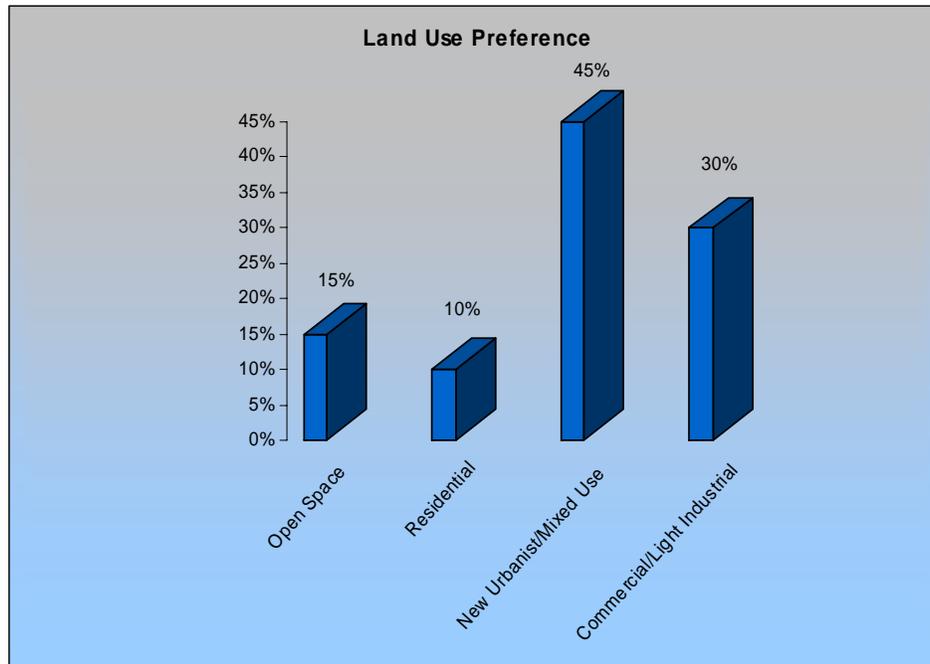


- **Scenario 1: Open Space Focus** – Scenario 1 offers several clear benefits, including extensive park and open space resources for the area, an improved scenic corridor, and ideally increase in property values and the attractiveness of the neighborhoods in the area, particularly Millwood and Edison. There would likely be limited actual economic benefit in terms of jobs and investment and there would be high operating costs associated with maintenance of the park areas.
- **Scenario 2: Residential Focus** – This scenario focuses primarily on the attraction of new residents to the area and conversion of the targeted properties into a mixture of single-family and multi-family housing units. As described in the market study, it has been projected that the area could experience the development of 170 new housing units over the next decade. These could in turn spur the attraction of neighborhood supportive businesses. In turn, together these actions could improve the attractiveness of the area as a place to live and create tax revenue streams for the city.
- **Scenario 3: New Urbanist/Mixed Use Focus** – New Urbanist/mixed use refers to a concept of development that has attempted to create “sustainable, walkable, environmentally and economically viable communities.” The movement is a reaction to the intense suburban development that began in the middle of the 20th century and continues today. These developments take a wide variety of forms but typically attempt to replicate urban living with design elements such as front porches, multi-story and use buildings (i.e., business at the street level and apartments above), etc. This type of development could be particularly appropriate in the Portage Creek area as the residential component could be attractive to empty nesters, people working at Bronson Hospital, and those who may want to live near downtown but also like the open space amenities that may develop in the area over time.
- **Scenario 4: Commercial/Light Industrial Focus** – For over a century, the Portage Creek Corridor was an industrial area that provided jobs. Neighborhoods evolved around this job center and many of the people living in the neighborhoods worked in the paper mills in the area. While the type of business environment that can exist in areas like Portage Creek the area has the basic infrastructure, land availability, and proximity to places such as the downtown, Bronson Hospital, and Western Michigan University that may make it attractive as a job center.

At the second public meeting, the consultant team tested two primary concepts for development of the reuse plan. The first was the overall preference of the public for one of the general land use scenarios illustrated in the previous section. The second focused on the fact that it is fairly likely that at least in the near term, if not the long term, much of the study area would be used for some type of open space. The results of this input are presented below.

As can be seen in Figure S-5, in the public meeting, the attendees supported New Urbanist/Mixed Use type development along with Commercial/Light Industrial – both of which have an employment component. Only 10 percent supported a predominantly residential emphasis while 15 percent supported a predominantly open space emphasis.

Figure S-5
Land Use Preference



Based on input provided by the EPA and its planning consultants, public input, and the market study, it is appropriate to plan, at least in the near term, for open space development on the former Allied Paper site. To that end, the public was asked to indicate their first, second, and third preferences for types of open space development.

The overwhelming first preference is bicycle/pedestrian trails. From there, passive areas and sports fields are the general preferences of the public. The consultant distributed a survey to residents of the neighborhoods through a mailing from the neighborhood associations.

The information from the neighborhood generally supported that from the public meetings – a greater emphasis on mixed use along with bicycle/pedestrian trails as the predominant preference for open space.

Reuse Plan

As mentioned previously, when this project began it was presumed that there would be three primary inputs into the Portage Creek Reuse Plan:

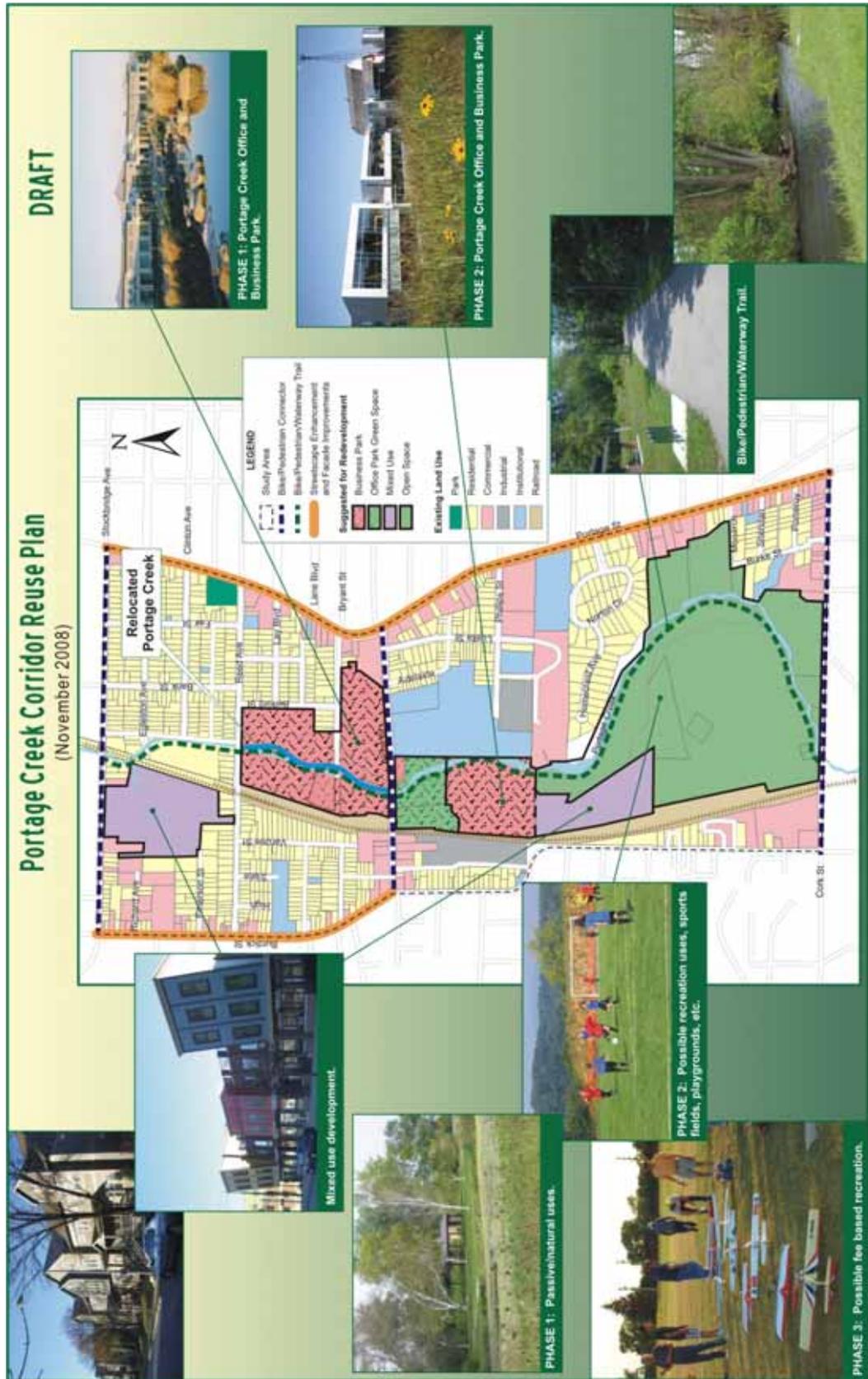
- The environmental analysis;
- The market study; and,
- Public input.

These have been described in the preceding chapters. Based on that information, the reuse plan shown in Figure S-6 was prepared. This plan has been developed in recognition of other planning efforts in Kalamazoo, including the existing Master Plan, the ongoing Downtown Kalamazoo Incorporated (DKI) planning process, the Parks and Recreation Master Plan, and the continuing Brownfield Redevelopment Program initiatives.

The reuse plan has several key components:

- A bicycle/pedestrian trail/creekway is proposed on the west side of Portage Creek (and the relocated Portage Creek) for the length of the study area from Stockbridge Street to Cork Street;
- Bicycle/pedestrian connectors along Stockbridge, Alcott and Cork Street to allow connections to the trail and facilitate neighborhood walkability;
- Improved streetscape on Portage Street (implementation of at least part of the approved but unfunded Portage Streetscape Plan);
- Continuation of streetscape improvements on Burdick south to at least Alcott Street;
- Mixed use development on the 14-acre private site on Stockbridge now occupied by the Bingo Hall and the State of Michigan Department of Human Services;
- Mixed use development on the western side of the 22-acre former Panelyte property;
- A business park in a campus like environment with a focus on office/light industrial type development with Phase 1 on the former Performance Paper site and Phase 2 on the northeastern portion of the former Panelyte property;
- A business park green space area on the former Lyondell Chemical property;
- Open space on the former Allied Paper site along with two private properties just east of Portage Creek;

Figure S-6
Portage Creek Reuse Plan



- Emphasis on implementing city programs relating to continuing housing and business façade improvement; and,
- Implementing a priority sidewalk and street improvement program.

For the most part, existing commercial and residential uses are not proposed to change. Zoning in the targeted area will be revised during the upcoming revision of the Master Plan to reflect the land use scenario in the Portage Creek Reuse Plan.

Table S-2 presents an overall implementation scenario for the Portage Creek Reuse Plan.

**Table S-2
Implementation**

- | |
|---|
| <ul style="list-style-type: none"> ■ Long term plan ■ Primary focus on open space and jobs ■ Year 1: General area clean-up ■ Years 1 – 2: Property assembly ■ Years 1 – 5: Portage and Burdick Street improvements ■ Years 1 – 5: Neighborhood housing improvement program ■ Years 1 – 10: Brownfield program development initiatives ■ Years 10 – 20: General market involvement |
|---|

The implementation program must focus initially on a general area cleanup. This could be done using volunteer organizations, or by creating jobs to focus on the clean up. The emphasis needs to be on making the “first entry” into the area attractive if there is any hope to entice developers in the future. The next steps would be property assembly, much of which is ongoing now and implementation of the mentioned streetscape, housing, and infrastructure improvements.

The Brownfield program is anticipated to lead the redevelopment effort for the areas targeted for mixed use or office/light industrial development. Within a reasonable time frame an incentive program should be established within the city’s guidelines and marketed to developers. At the same time, the City should begin “selling” the plan to local and national developers. These early discussions will provide good information for creating a workable redevelopment program in the area.

As noted, this plan is a long term plan. The market study suggested a target acreage of 30 acres. This plan is suggesting a total developable amount of about 60 acres or double what it was projected the market could bear. This is for two reasons. The first is that from a planning standpoint and from what the public suggested, there was more interest in some kind of development rather than just open space and there was little support for extensive residential

development beyond what would be contained in the mixed use development. The second is that despite the market study, there appear to be specific areas of opportunity because of the area's unique location that would not surface in the market study. These are related to the location of the area within the general proximity of the study area to Bronson Hospital, downtown, and Western Michigan University; the possibility of bioresearch and related businesses which have relatively low infrastructure requirements in terms of truck access, building footprints, etc.; and the continuing interest in alternative energy companies both from a research and production standpoint.

Additionally, the consultant suggests that a vision should exist that goes beyond the limits of the market study, but is not unreasonable. This vision is based on capitalizing on the natural features of the area, creating a campus like environment, and establishing a sense of place that will make this area an attractive setting for development. This positive development would have huge implications for helping the local neighborhoods revitalize and thrive.

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Appendix A Technical Memorandum No. 1 – Environmental Feasibility Report

Appendix B Technical Memorandum No. 2 – Generalized Market Analysis

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1. Introduction

Over the last two decades the Portage Creek area south of downtown Kalamazoo has devolved from a thriving industrial location with an emphasis on the paper mill industry to a blighted, largely abandoned area that is in the middle of two Kalamazoo neighborhoods – Milwood and Edison – that are home to thousands of Kalamazoo residents.

The Portage Creek Corridor Reuse Plan is important to the City of Kalamazoo, the residents of the Milwood and Edison neighborhoods, and to those in the region who may benefit from new jobs, housing, or recreational opportunities in the Portage Creek Corridor (Figure 1-1).

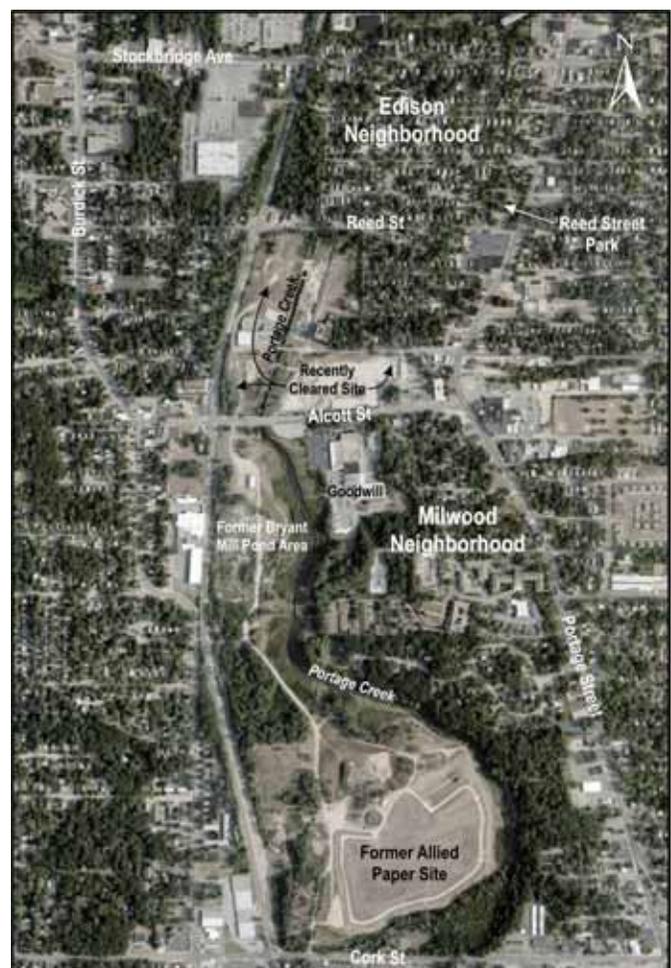
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The planning effort involved the following tasks:

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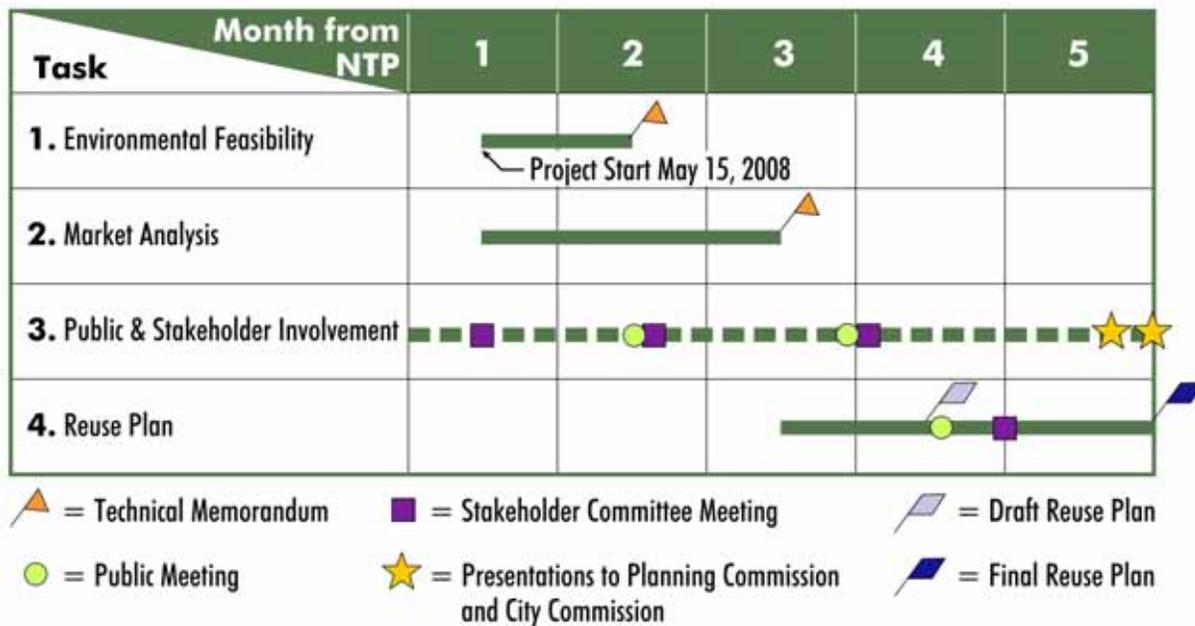
Figure 1-1
Portage Creek Corridor



This report presents the Reuse Plan that has been developed in concert with the public and the Steering Committee. Supporting documentation is provided in the appendix. Appendix A is a summary of work conducted by the city prior to the development of the Reuse Plan, which includes a detailed analysis by the consultant firm of Fishbeck, Thompson, Carr & Huber, Inc.² that presents information on properties within the study area with potential environmental issues and their potential future uses. Appendix B presents a market study, which examines the current and future market conditions in the area as they relate to the future reuse of the Portage Creek Corridor.

This study process included three public input sessions (Figure 1-2). These input sessions, combined with the findings of the environmental analysis and the market study, formed the basis for the reuse plan and are discussed in more detail in Chapter 2. In addition to the public input sessions, the consultant team worked closely with City staff, including representatives of Community Planning and Development Department, the Kalamazoo Brownfield Redevelopment Authority, City officials, and community leaders in development of this reuse plan.

Figure 1-2
Project Schedule



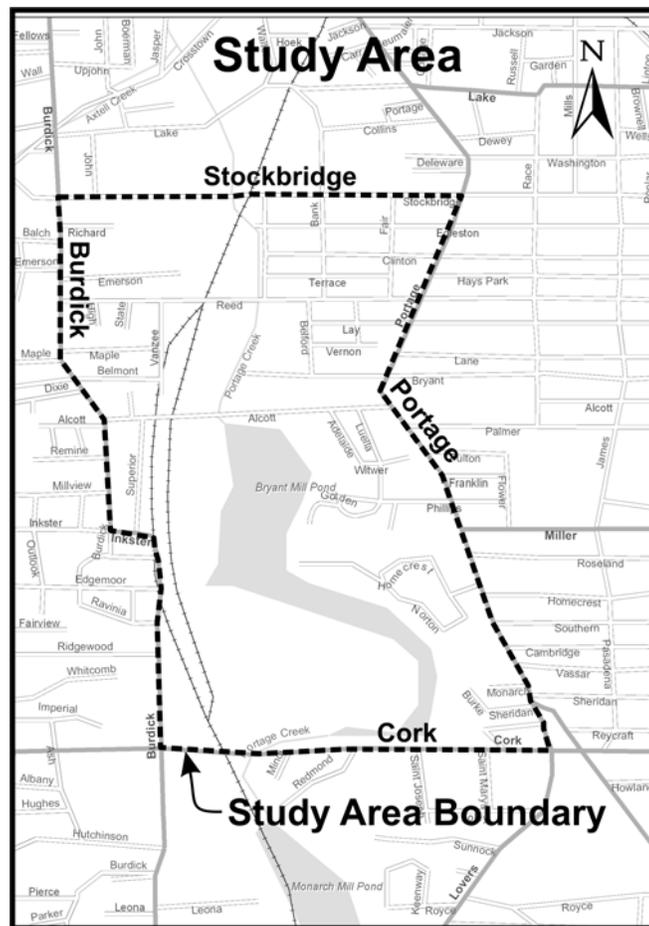
² Existing Conditions Report, Fishbeck, Thompson, Carr & Huber, Inc., prepared for the City of Kalamazoo, 2008.

2. Planning Input

2.1 Environmental Issues

A basic planning factor in the reuse plan is the environmental condition and viability of many of the properties in the study area (Figure 2-1). Appendix A presents the environmental feasibility report prepared by the consultant team, which is summarized briefly here. The consultant team initiated its assessment with a review of the Existing Conditions Report prepared by Fishbeck, Thompson, Carr & Huber, Inc. (FTC&H).³

Figure 2-1
Project Study Area



³ Ibid.

Table 2-1 presents a summary of information presented in the report. Thirty-three sites, ranging from quarter-acre size lots to the 95-acre Allied Paper property, were examined in the analysis. These sites were included in the analysis, regardless of size or current land use, because they had known or suspected environmental contamination issues.

More than 100 acres in the southern part of the corridor (the Allied Paper and Panelyte properties) have soil and groundwater contamination from polychlorinated biphenyls (PCBs) and other contaminants. PCBs have also been detected in surface water, sediments and fish tissue from Portage Creek. These properties are being investigated and remediated by Michigan Department of Environmental Quality (MDEQ) and the Environmental Protection Agency (EPA). According to the Existing



A view of Portage Creek.

Conditions Report, these properties have a low potential for residential, commercial or industrial land use. The Allied Paper site is part of the Kalamazoo River Superfund project and is referred to as Operating Unit (OU) 1. The Environmental Protection Agency (EPA) is conducting a separate planning process to determine the viability of potential future land use on the Allied Site. In March 2008, an EPA-approved Remedial Investigation (RI) Report⁴ for Allied Paper OU was published. Some of the findings of the RI are as follows:

- Soils/sediments contamination exceeding background/residential and other potentially applicable soil criteria (commercial/industrial and ecological) exists at the site and that contaminated residuals have also migrated onto adjacent residential/commercial areas.
- PCBs are present in the groundwater and seeps at the site and are still being transported to Portage Creek.
- Average PCB concentrations in surface water from Portage Creek from 2000 to 2006 are approximately two times higher downstream of the site versus upstream locations.
- PCB concentrations in fish tissue samples from Portage Creek exceed some health consumption criteria.

The RI states that the Feasibility Study "should consider the current and future land uses . . . and determine whether an area poses an actual or potential risk to human health and the environment." The RI also suggests that areas that will be restricted to industrial uses should be evaluated with

⁴ Remedial Investigation Report, Allied Paper, Inc. Operable Unit, Camp, Dresser and McKee, prepared for Michigan Department of Environmental Quality, March 2008.

The Feasibility Study is the next step in the Superfund process for the Allied site. It will be followed by Remedy Selection, which identifies cleanup levels and selects a site remedy. These are documented in a Record of Decision (ROD). After the ROD, the Superfund steps include Remedial Design, Remedial Action and Post Construction (i.e., operation, maintenance). The implications of the EPA process to the Reuse Plan are several. First, the EPA planning process may not be completed until late 2009 or 2010. Second, the existing site is owned by an entity known as the Principal Responsible Party (PRP). The PRP will be responsible for long-term maintenance and monitoring of the site.



Power plant, now demolished, on the former Performance Paper Site now owned by the City of Kalamazoo.

Nearly half of the other sites examined in the study area are current or former underground storage tank (UST) sites and include four active gas station sites and ten former gas station sites. These sites are typically half-acre lots or smaller and are located on the periphery of the study area along the mostly-commercial arterials (Portage, Cork and Burdick Streets). A few of these are known leaking UST (LUST) sites that are currently being addressed by parties under MDEQ oversight and at least two of these sites have land use restrictions and/or groundwater use prohibitions. The report indicates that the highest potential use for these sites is commercial, and that use of these sites for residential use would require a high level of effort to assess and/or clean up. These sites are generally too small for industrial use and conversion to green space would remove them as tax revenue sources.

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2.2 Market Study

The Portage Creek Reuse Plan has been developed during a period of recessionary activity. Housing foreclosures, job losses, volatile gas prices, have all contributed to an economy in which businesses and individuals alike are retrenching, spending less, and forgoing major expenditures on items such as automobiles and homes. To conduct the market analysis, the consultant examined

the market attraction of an area encompassed by a two-mile radius of the study area, called the planning market area. Because the study area is one of the few undeveloped tracts of land in Kalamazoo, it is not unreasonable to think that development spurred by the population and business surrounding it could be focused on the study area.

The planning market area has a disproportionate group of young people in households of child-bearing years with higher unemployment and declining employment relative to the Kalamazoo-Portage Housing Market Area (HMA).⁵ The planning market area's significantly higher portion of employment in information services and transportation/utilities sectors, but lower employment in manufacturing and service sectors, suggests that the planning market area represents potential growth opportunities in the job market in those latter categories of jobs.

The study area as represented by the planning market area is an area or group of neighborhoods in transition. It is an area where the younger generation can invest in a home and expect it to appreciate over the years. This is further exemplified by the income data for the planning market area. Income is typical for a younger, yet less established, household as reflected in the income from \$0 to approximately \$25,000 being 135 percent of the Kalamazoo-Portage HMA. Conversely, there is a lower representation in income in the \$75,000 to over \$150,000 category which includes well-established households, many of which are dual income households.

In the study area's current condition, forecasts for development of the study area are bleak. This area will not develop unless there is some incentive for its development. The key incentive will include mitigation of the contamination to safe redevelopment levels. Amenities that make the area more attractive will also be needed to draw development to the study area rather than to other sites in Kalamazoo or neighboring areas.

These factors, coupled with the current economic conditions – high energy costs, the increased restrictions on lending for home ownership, the increased demand in multi-family housing and the propensity of households to locate near jobs – could create a demand for the planning market area, once environmental and physical cleanup is accomplished and the area is promoted by the community. This new entry in the market could be poised to complement CBD housing. The planning market area could attract for-sale and for-rent housing, jobs, and associated services to include retail. Amenities are very important in attracting housing. One key amenity the study area could have is open space. Given the restrictions that will likely be placed on much of the cleaned-up areas, at least some additional open space will be a logical result. Some of the contaminated areas that were once a liability to development could be turned into an incentive through their use as an amenity.

This will be a long-term project and be directly proportional to job growth. Between 1990 and 2000, approximately 22,000 net new jobs were created in the HMA. However, no new net jobs were created in the current decade to date. Given today's economic situation, it is difficult to determine what the future holds for the region's economy. Planning for the area must be based on some historic level of job growth. It would be extremely optimistic to assume that 20,000 jobs would be created in the next decade as were created between 1990 and 2000. Conversely, it

⁵ For the market analysis, information for the Kalamazoo-Portage Housing Market Area (made up of Kalamazoo and Van Buren Counties) was used as the baseline data.

would be highly pessimistic to assume no new jobs would be created. Looking at past job growth, a median number of 10,000 jobs is rational as a basis for planning purposes.

If an assumption is made that a level of 10,000 net job growth can be generated by Kalamazoo-Portage HMA over the 2010 to 2019 time frame, this could translate into demand for approximately 630 housing units that could be developed in the HMA. The distribution of these housing units will be about 40 percent rental housing and approximately 60 percent for-sale housing. Assuming an aggressive 25 percent capture of this housing by the planning market area, approximately 170 housing units would be needed, many of which could be developed in the immediate project study area. This historic average estimate of job growth will create demand for housing, retail, industrial, office, and associated infrastructure requiring approximately 30 acres (Table 2-1) in the planning market area, which also could be focused in the immediate study area.



The Edison neighborhood has a strong neighborhood association but has challenges that will have to be addressed to create an environment for economic development and enhancement.

**Table 2-1
Development Land Requirements**

Multi-family housing @ 15 units/Ac.	4.50 Acres
Single family housing @ 7.9 units/Ac.	12.90 Acres
Retail \$300/SF Sale	1.41 Acres
Office \$200/SF Job	4.70 Acres
Light industrial	6.49 Acres

Source: Integra Realty

This excludes the portion of the study area that will not permit construction either due to physical constraints or environmental issues. This latter will create the parks and open space area which are anticipated to create an attractive park-like setting, enhancing the appeal of the study area.

The analysis in the market study report presents a possible opportunity for the study area for real development. The remaining question is whether the opportunity is realistic. To assess that, representatives of Corradino conducted a series of one-on-one interviews with public and policy officials and private sector interests, including community leaders, members of the planning commission, developers, and citizens interested in the Portage Creek Reuse Plan. The focus of those

interviews was an assessment of the market possibilities for complementary redevelopment of vacant portions of the study area.

A series of common themes emerged from these discussions. Nearly all people interviewed identified not only the immediate study area but the surrounding neighborhoods – Edison, Milwood, Westnedge Hill, and Vine – as being important to this process of complementary redevelopment. There was concern about the image of the area, particularly Portage Street, as being a negative factor that could impact or limit future development opportunities. There was universal recognition among those interviewed that the green space opportunities in the area were positives that could result in attractive amenities to enhance and incent both residential and industrial/commercial redevelopment. It was apparent through the conversations that the possibility of development activities was unlikely in either the residential or commercial market without significant public push, support and incentive.

3. Public Input

3.1 Public Involvement Process

The consultant conducted a thorough public outreach process for the study. Three public meetings were held:

- June 24, 2008
- August 12, 2008
- December 2, 2008

For each of these meetings a variety of techniques was used to notify the public of the meetings. These included distribution of flyers throughout the neighborhoods, a technique known as Robocalling, which involves random dialing of phone numbers in a select area and playing a pre-recorded message; and press releases to the local media. All the information for meeting notices and the robocalling was in English and Spanish. In addition to these meetings, the consultant made presentations to groups such as the Kalamazoo City Environmental Concerns Committee and the Milwood Business Association.



The public meetings were held in the meeting room of the Edison Neighborhood Association.

The focus of the first meeting was to introduce the project. Many people who attended wanted to know what was happening in the area, particularly on the Allied Paper Site. The consultant and the City staff were careful to differentiate the City process and the EPA process and to emphasize that there was coordination between the two. The second meeting involved presentation of several alternative land use scenarios, which are discussed in the next section of this report and the recording of public preferences for the various scenarios and for specific open space uses. The third meeting involved presentation of the Draft Reuse Plan.

Throughout the public input process several themes emerged. People expressed continuing appreciation for the natural beauty of the area. People also expressed concern about neighborhood issues – infrastructure, housing, crime, etc. As shown in the preferences section, people supported open space concepts but also were concerned about jobs and economic development for Kalamazoo.

Throughout the study, a project website was maintained – www.portagecreekreuse.com. This Web site will be functional through at least May 2009. The Web site allowed the public to readily access reports, maps, and upcoming event information.

<p>Public Meeting Notice Portage Creek Corridor Reuse Plan</p> <p>The City of Kalamazoo is conducting a study to create a new land use plan for the Portage Creek Corridor. The new land use plan is important to the City of Kalamazoo, the residents of the Millwood and Edison Neighborhoods, and those in the region who may benefit from the opportunities created by the plan. The plan is important because of both the revitalization potential and the residual environmental contamination in the area.</p> <p>Community members are encouraged to provide their thoughts on the future land uses for development in the area.</p> <p>A third public meeting will be held to focus on the findings of the study and the draft reuse plan. The meeting will be held on</p> <p style="text-align: center;">December 2, 2008 from 6:00 p.m. to 8:00 p.m. at the Edison Neighborhood Association, 816 Washington Avenue</p> <p>Please plan on attending. Your participation is important. Refreshments will be served.</p>	<p>Comunicado de Reunión Pública Plan de Reutilización del Corredor Portage Creek</p> <p>La Ciudad de Kalamazoo está llevando a cabo un estudio para elaborar un nuevo plan de uso de la tierra en el Corredor Portage Creek. El Nuevo plan de uso de la tierra es importante para la Ciudad de Kalamazoo, los residentes de las vecindades de Millwood y Edison y los demás residentes de la región que se pudieran beneficiar de las oportunidades creadas por el plan. El plan es importante tanto por la posibilidad de revitalización que ofrece, como por las condiciones de contaminación ambiental residual del área.</p> <p>Se exhorta a los integrantes de la comunidad a ofrecer sus opiniones acerca de los futuros usos de la tierra para el desarrollo en el área. Se celebrará una tercera reunión pública para centrarse en los resultados del estudio y en el borrador del plan de reuso. La reunión tendrá lugar el</p> <p style="text-align: center;">2 de diciembre de 2008 de 6:00 p.m. a 8:00 p.m. en la Asociación de la Vecindad de Edison (Edison Neighborhood Association), 816 Washington Avenue</p> <p>Le agradeceremos haga lo posible por asistir. Su participación es importante. Se servirán refrigerios.</p>	
<p>For more information, please visit the study Web site: www.portagecreekreuse.com</p>		

3.2 Alternative Land Use Scenarios

As part of the planning process, four distinct land use scenarios were created. These evolved from the basic existing conditions in the study area (Figure 3-1) and the analyses and public input developed during the study. As can be seen in Figure 3-1, the study area is currently a mixture of residential, vacant industrial, marginal concentrations of interior commercial, and scattered neighborhood-level commercial activity on the fringes.

Figure 3-1
Existing Land Use



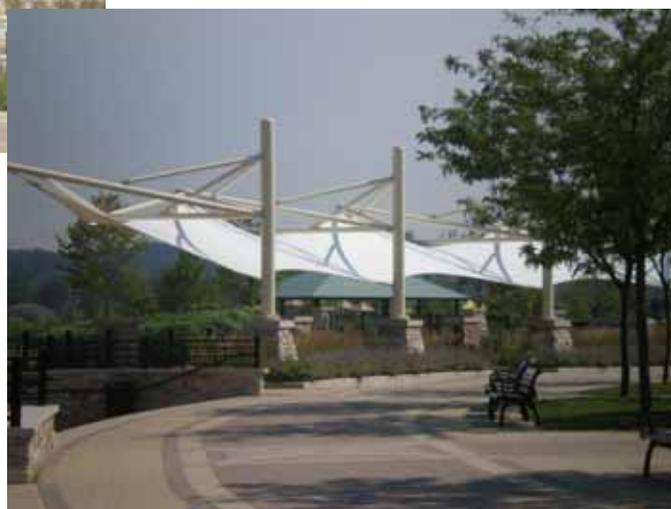
The vacant industrial area south of Alcott Street is predominately comprised by the former Allied Paper site, which is now an EPA Superfund Site known as Operating Unit (OU) 1. The city has control of the former Panelyte site, which is just south of Alcott Street and west of the OU 1 site and comprises about 22 acres. The city also has control of the former Performance Paper site, which is just north of Alcott Street and comprises approximately 27 acres. In addition, just to the north and

west of the Performance Paper site is a privately owned site on Stockbridge with 14 acres. Although this site is in private ownership it has been mentioned as a possible property to join with the city holdings in the area. Together, these parcels represent the core set of properties that could be readily focused upon for development to serve as a catalyst for long-term revitalization and reuse in the Portage Creek corridor. It is believed that combined with the investment in the Portage Creek Trail, investment in the bountiful open space extent in the area, and the eventual development of the Allied Paper site into a community resource, that development can occur such as has occurred on in the Riverfront and Northside neighborhoods that will have very positive results. To identify what type of development activities should be focused on in the corridor, a number of alternative scenarios were developed. These include:

- Scenario 1: Open Space Focus (Figure 3-2);
- Scenario 2: Residential Focus (Figure 3-3);
- Scenario 3: New Urbanist/Mixed Use Focus (Figure 3-4); and,
- Scenario 4: Commercial/Light Industrial Focus (Figure 3-5).

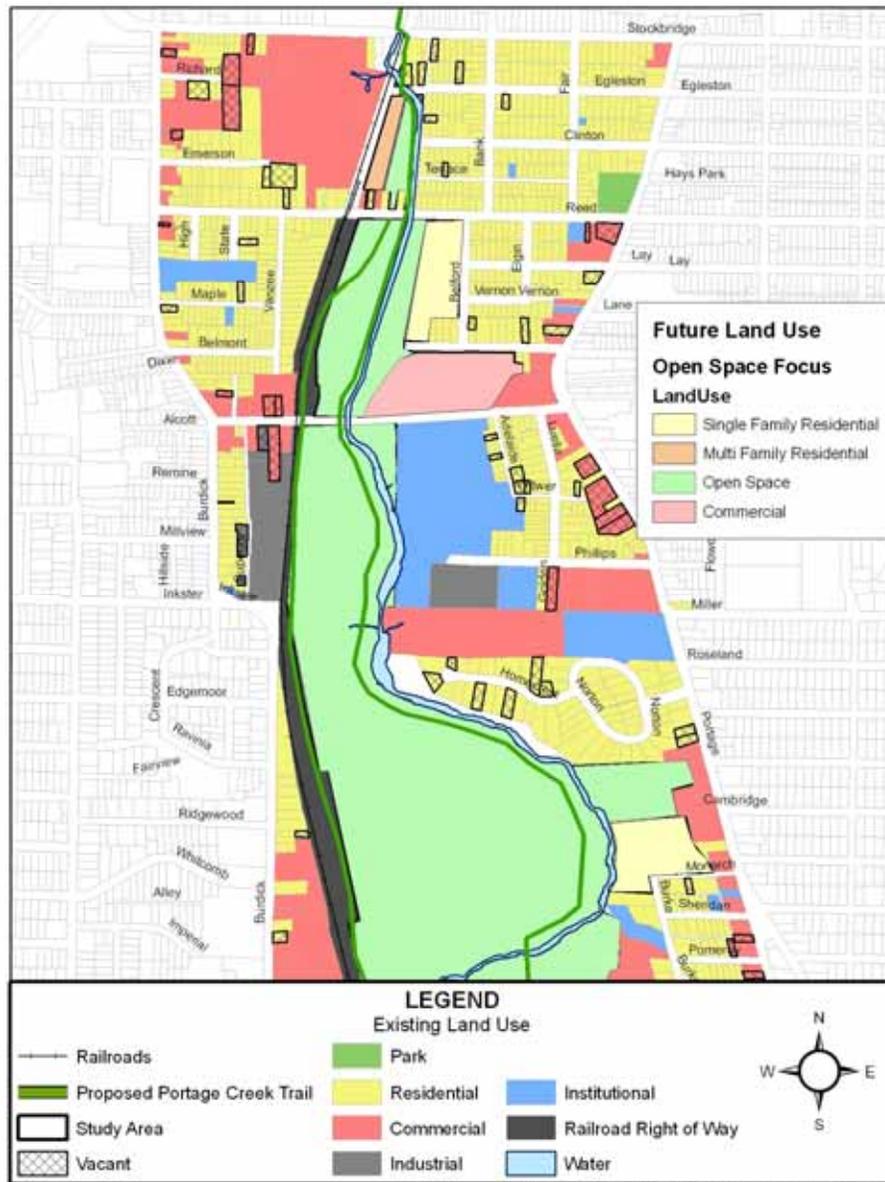
Scenario 1: Open Space Focus

Scenario 1 proposes creating an open space environment through the bulk of the publicly-controlled area in the corridor which would complement the eventual uses of the Allied Superfund Site, which are presumed to be some type of commercial space. The result would be a 150 acre park like area that could well become a community and regional destination. A similar park exists in Grand Rapids (about two miles from downtown).



Scenario 1 offers several clear benefits, including extensive park and open space resources for the area, an improved scenic corridor, and ideally increase in property values and the attractiveness of the neighborhoods in the area, particularly Millwood and Edison. There would likely be limited actual economic benefit in terms of jobs and investment and there would be high operating costs associated with maintenance of the park areas.

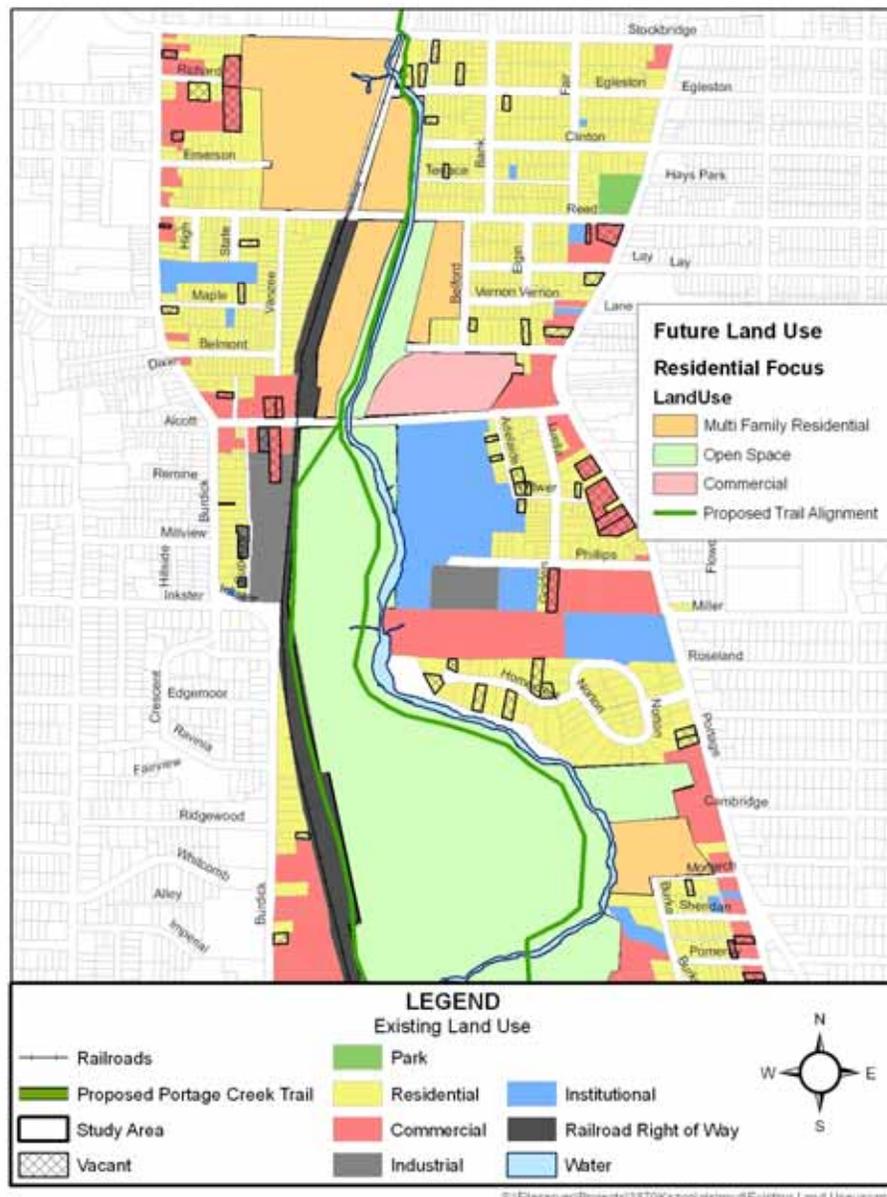
Figure 3-2
Scenario 1: Open Space Focus



Scenario 2: Residential Focus

This scenario focuses primarily on the attraction of new residents to the area and conversion of the targeted properties into a mixture of single-family and multi-family housing units. As described in the market study, it has been projected that the area could experience the development of 170 new housing units over the next decade. These could in turn spur the attraction of neighborhood supportive businesses. In turn, together these actions could improve the attractiveness of the area as a place to live and create tax revenue streams for the city.

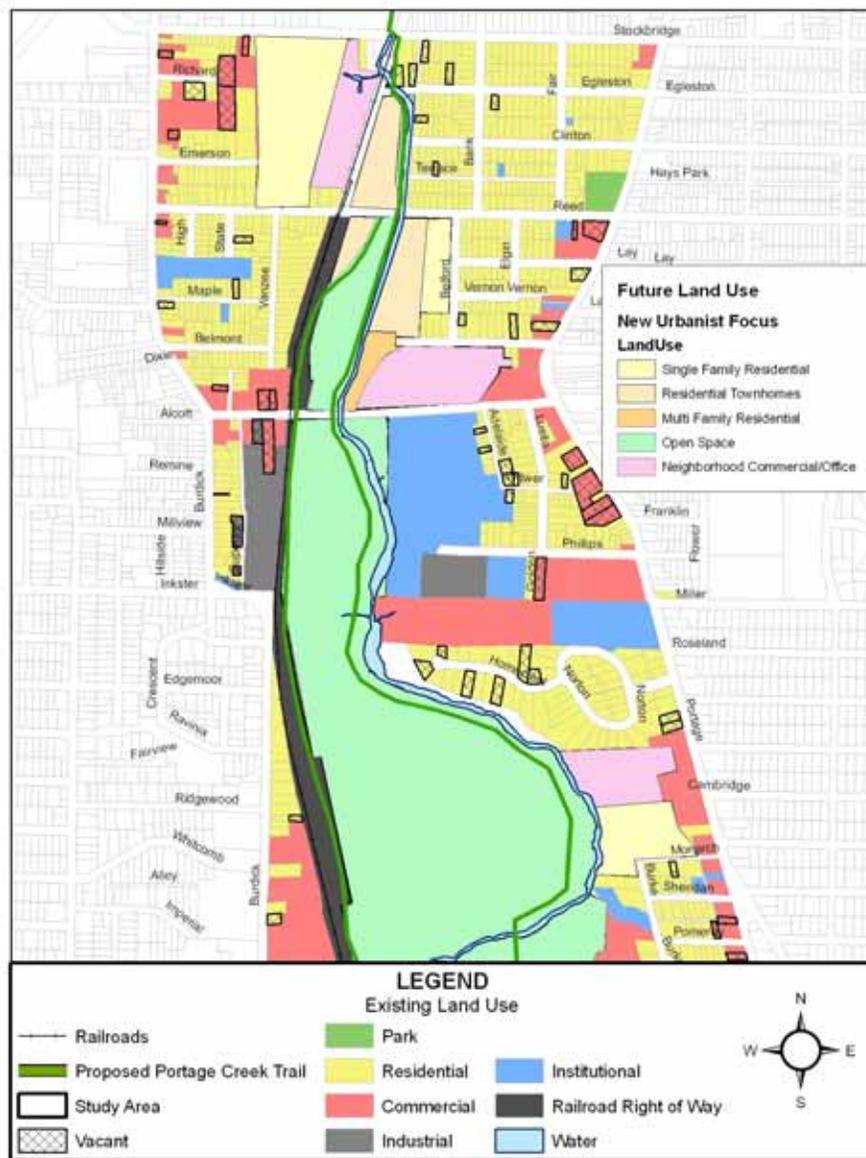
Figure 3-3
Scenario 2: Residential Focus



Scenario 3: New Urbanist/Mixed Use Focus

New Urbanist/mixed use refers to a concept of development that has attempted to create “sustainable, walkable, environmentally and economically viable communities.” The movement is a reaction to the intense suburban development that began in the middle of the 20th century and continues today. These developments take a wide variety of forms but typically attempt to replicate urban living with design elements such as front porches, multi-story and use buildings (i.e., business at the street level and apartments above), etc. This type of development could be particularly appropriate in the Portage Creek area as the residential component could be attractive to empty nesters, people working at Bronson Hospital, and those who may want to live near downtown but also like the open space amenities that may develop in the area over time.

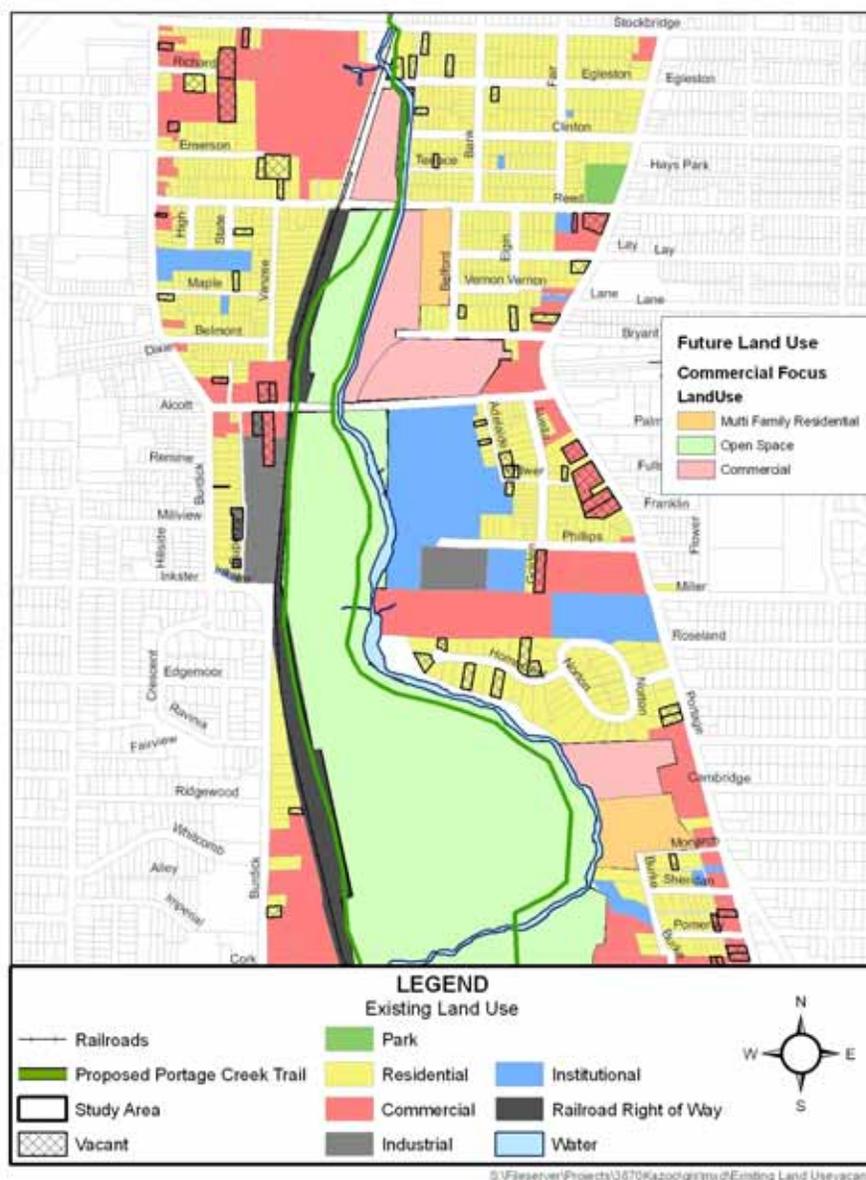
Figure 3-4
Scenario 3: New Urbanist/Mixed Use Focus



Scenario 4: Commercial/Light Industrial Focus

For over a century, the Portage Creek Corridor was an industrial area that provided jobs. Neighborhoods evolved around this job center and many of the people living in the neighborhoods worked in the paper mills in the area. While the type of business environment that can exist in areas like Portage Creek the area has the basic infrastructure, land availability, and proximity to places such as the downtown, Bronson Hospital, and Western Michigan University that may make it attractive as a job center.

Figure 3-5
Commercial/Light Industrial Focus

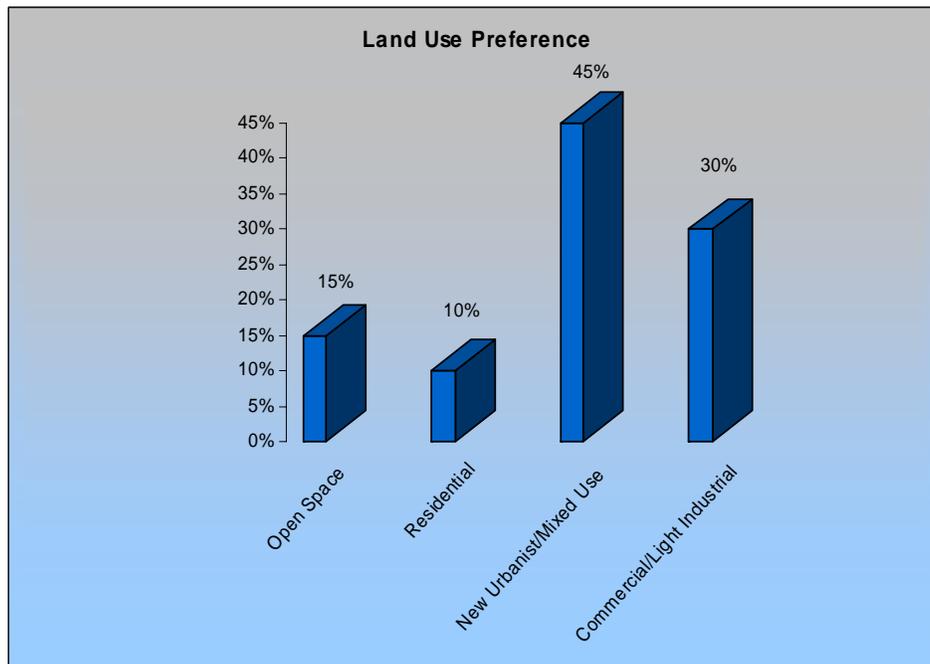


3.3 Results of Public Input and Survey

At the second public meeting, the consultant team tested two primary concepts for development of the reuse plan. The first was the overall preference of the public for one of the general land use scenarios illustrated in the previous section. The second focused on the fact that it is fairly likely that at least in the near term, if not the long term, much of the study area would be used for some type of open space. The results of this input are presented below.

As can be seen in Figure 3-6, in the public meeting the attendees supported New Urbanist/Mixed Use type development along with Commercial/Light Industrial – both of which have an employment component. Only 10 percent supported a predominantly residential emphasis while 15 percent supported a predominantly open space emphasis.

Figure 3-6
Land Use Preference



Based on input provided by the EPA and its planning consultants, public input, and the market study, it is appropriate to plan, at least in the near term, for open space development on the former Allied Paper site. To that end, the public was asked to indicate their first, second, and third preferences for types of open space development. Their input is reflected in Figures 3-7a through 3-7c.

Figure 3-7a
Open Space Preference – First

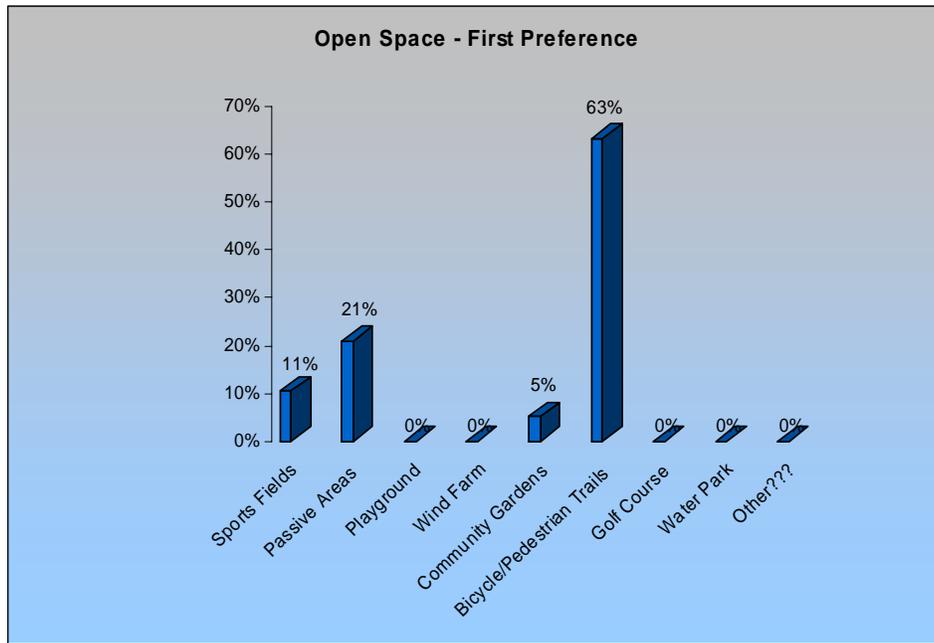


Figure 3-7b
Open Space Preference – Second

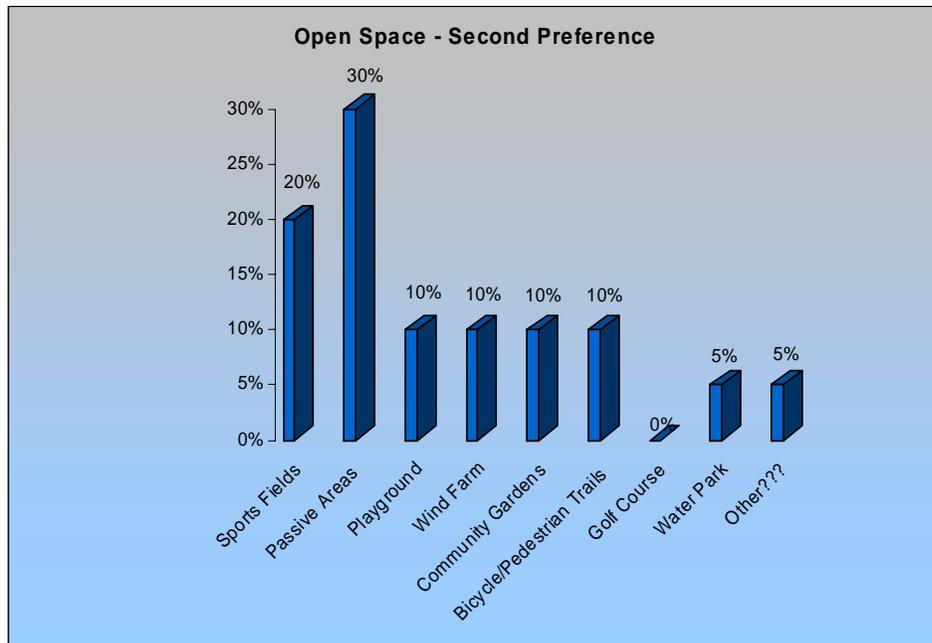
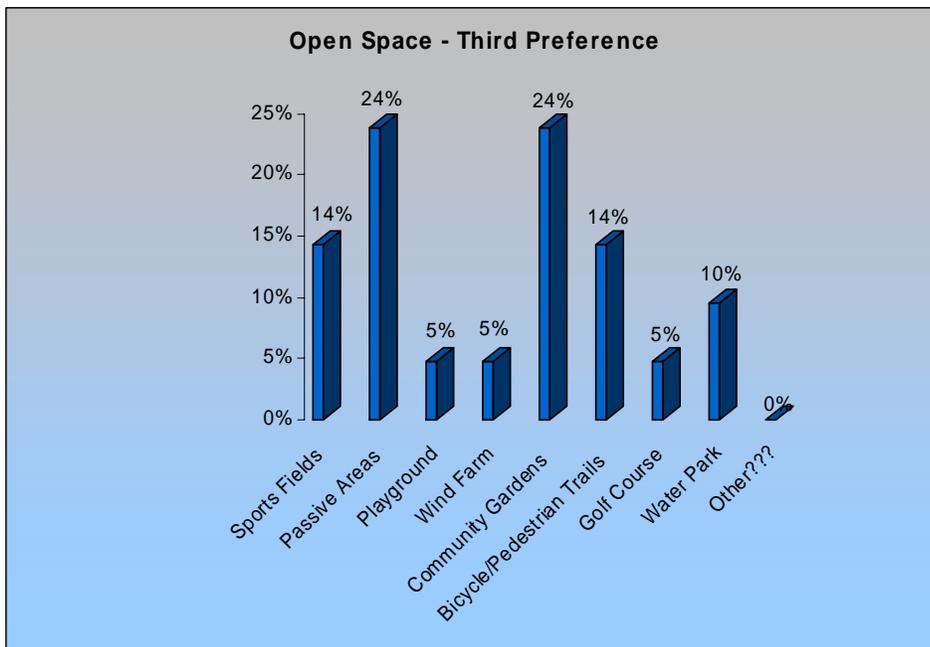


Figure 3-7c
Open Space Preference – Third



The overwhelming first preference is bicycle/pedestrian trails. From there, passive areas and sports fields are the general preferences of the public. The consultant distributed a survey to residents of the neighborhoods through a mailing from the neighborhood associations. Figures 3-8a and 3-8b present the results of that survey.

The information from the neighborhood generally supported that from the public meetings – a greater emphasis on mixed use along with bicycle/pedestrian trails as the predominant preference for open space.

Figure 3-8a
Neighborhood Survey Results – Land Use Preference

1. As mentioned above, over half the approximately 200 acres in the study area will likely be open space. There are approximately 50 acres of property that could be redeveloped. In these areas, which of the following would you prefer?

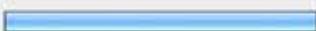
		Response Percent	Response Count
Continued emphasis on open space.		21.7%	5
A residential focus.		4.3%	1
A commercial/industrial focus.		21.7%	5
A mixed use focus.		56.5%	13
<i>answered question</i>			23
<i>skipped question</i>			1

Figure 3-8b
Neighborhood Survey Results – Open Space Preference

2. Given that there will be significant amounts of open space in the proposed plan for the Portage Creek area, please select your top three choices for including in the reuse plan (select your top three choices below).

	First Choice	Second Choice	Third Choice	Rating Average	Response Count
Sports Fields	12.5% (1)	37.5% (3)	50.0% (4)	2.38	8
Passive Areas	11.1% (1)	22.2% (2)	66.7% (6)	2.56	9
Playground	50.0% (2)	50.0% (2)	0.0% (0)	1.50	4
Wind Farm	40.0% (2)	20.0% (1)	40.0% (2)	2.00	5
Community Gardens	22.2% (2)	55.6% (5)	22.2% (2)	2.00	9
Bicycle/Pedestrian Trails	62.5% (15)	20.8% (5)	16.7% (4)	1.54	24
Golf Course	0.0% (0)	100.0% (1)	0.0% (0)	2.00	1
Water Park	33.3% (1)	0.0% (0)	66.7% (2)	2.33	3
Other (please specify)					6
<i>answered question</i>					24
<i>skipped question</i>					0

4. Reuse Plan

4.1 Plan Description

As mentioned previously, when this project began it was presumed that there would be three primary inputs into the Portage Creek Reuse Plan:

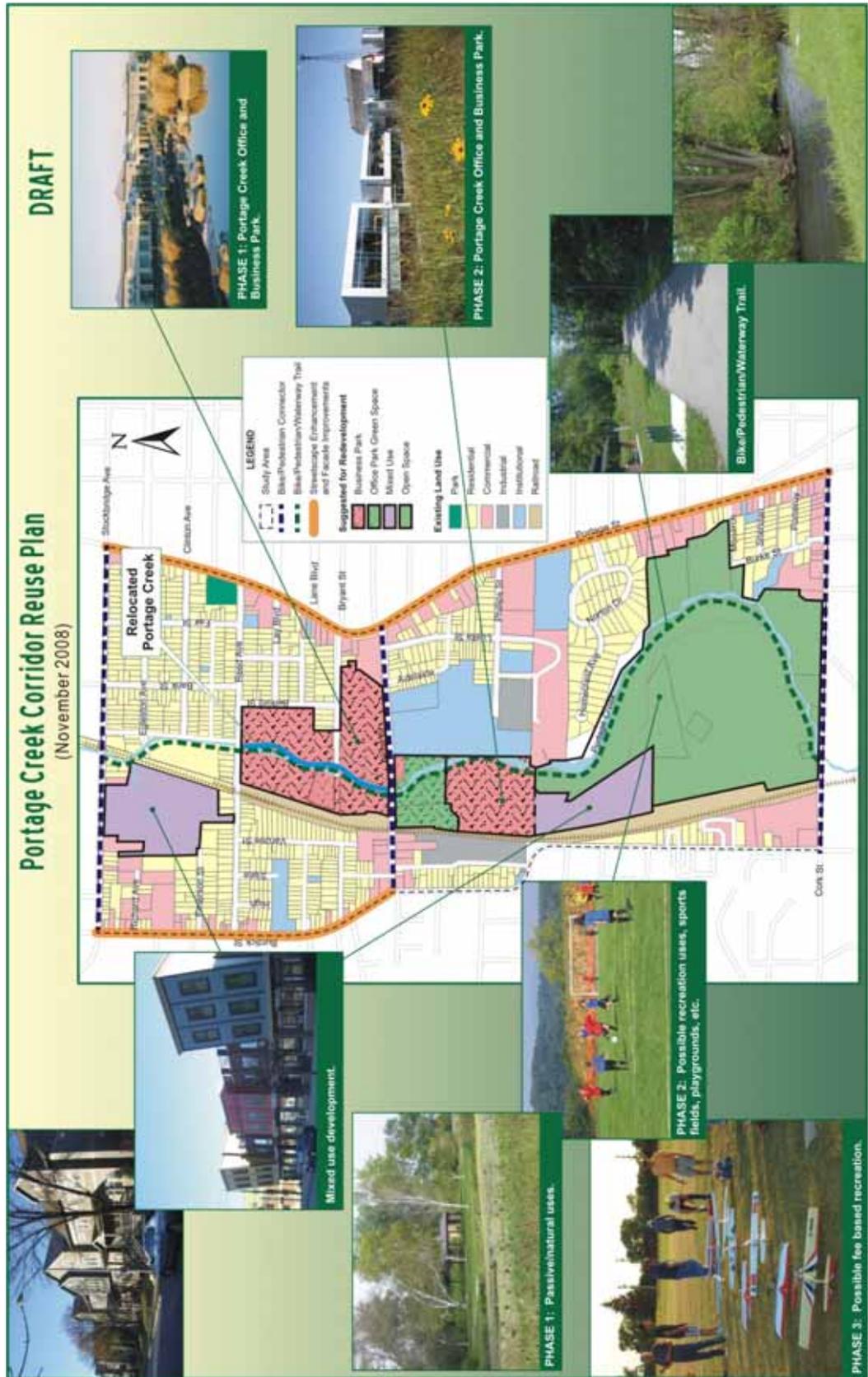
- The environmental analysis;
- The market study; and,
- Public input.

These have been described in the preceding chapters. Based on that information, the reuse plan shown in Figure 4-1 was prepared. This plan has been developed in recognition of other planning efforts in Kalamazoo, including the existing Master Plan, the ongoing Downtown Kalamazoo Incorporated (DKI) planning process, the Parks and Recreation Master Plan, and the continuing Brownfield Redevelopment Program initiatives.

The reuse plan has several key components:

- A bicycle/pedestrian trail/creekway is proposed on the west side of Portage Creek (and the relocated Portage Creek) for the length of the study area from Stockbridge Street to Cork Street;
- Bicycle/pedestrian connectors along Stockbridge, Alcott and Cork Street to allow connections to the trail and facilitate neighborhood walkability;
- Improved streetscape on Portage Street (implementation of at least part of the approved but unfunded Portage Streetscape Plan);
- Continuation of streetscape improvements on Burdick south to at least Alcott Street;
- Mixed use development on the 14-acre private site on Stockbridge now occupied by the Bingo Hall and the State of Michigan Department of Human Services;
- Mixed use development on the western side of the 22-acre former Panelyte property;
- A business park in a campus like environment with a focus on office/light industrial type development with Phase 1 on the former Performance Paper site and Phase 2 on the northeastern portion of the former Panelyte property;
- A business park green space area on the former Lyondell Chemical property;

Figure 4-1
Portage Creek Reuse Plan



- Open space on the former Allied Paper site along with two private properties just east of Portage Creek;
- Emphasis on implementing city programs relating to continuing housing and business façade improvement; and,
- Implementing a priority sidewalk and street improvement program.

For the most part, existing commercial and residential uses are not proposed to change. Zoning in the targeted area will be revised during the upcoming revision of the Master Plan to reflect the land use scenario in the Portage Creek Reuse Plan.

Table 4-1 presents an overall implementation scenario for the Portage Creek Reuse Plan.

**Table 4-1
Implementation**

- | |
|---|
| <ul style="list-style-type: none"> ■ Long term plan ■ Primary focus on open space and jobs ■ Year 1: General area clean-up ■ Years 1 – 2: Property assembly ■ Years 1 – 5: Portage and Burdick Street improvements ■ Years 1 – 5: Neighborhood housing improvement program ■ Years 1 – 10: Brownfield program development initiatives ■ Years 10 – 20: General market involvement |
|---|

The implementation program must focus initially on a general area cleanup. This could be done using volunteer organizations, or by creating jobs to focus on the clean up. The emphasis needs to be on making the “first entry” into the area attractive if there is any hope to entice developers in the future. The next steps would be property assembly, much of which is ongoing now and implementation of the mentioned streetscape, housing, and infrastructure improvements.

The Brownfield program is anticipated to lead the redevelopment effort for the areas targeted for mixed use or office/light industrial development. Within a reasonable time frame an incentive program should be established within the city’s guidelines and marketed to developers. At the same time, the City should begin “selling” the plan to local and national developers. These early discussions will provide good information for creating a workable redevelopment program in the area.

As noted, this plan is a long term plan. The market study suggested a target acreage of 30 acres. This plan is suggesting a total developable amount of about 60 acres or double what it was projected the market could bear. This is for two reasons. The first is that from a planning

standpoint and from what the public suggested, there was more interest in some kind of development rather than just open space and there was little support for extensive residential development beyond what would be contained in the mixed use development. The second is that despite the market study, there appear to be specific areas of opportunity because of the area's unique location that would not surface in the market study. These are related to the location of the area within the general proximity of the study area to Bronson Hospital, downtown, and Western Michigan University; the possibility of bioresearch and related businesses which have relatively low infrastructure requirements in terms of truck access, building footprints, etc.; and the continuing interest in alternative energy companies both from a research and production standpoint.

Additionally, the consultant suggests that a vision should exist that goes beyond the limits of the market study, but is not unreasonable. This vision is based on capitalizing on the natural features of the area, creating a campus like environment, and establishing a sense of place that will make this area an attractive setting for development. This positive development would have huge implications for helping the local neighborhoods revitalize and thrive.

4.2 Next Steps

The Portage Creek Reuse Plan, upon adoption by the City Planning Commission, becomes a part of the City's Master Plan. The plan will be a catalyst for future development proposals.

Appendix A

Technical Memorandum No. 1 Environmental Feasibility Report

DRAFT

Portage Creek Corridor Reuse Plan

Environmental Feasibility Report

Submitted to:

City of Kalamazoo, Michigan

Submitted by:

The Corradino Group of Michigan, Inc.

June 2008

APPENDIX A TO FINAL REPORT

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1. Introduction

Over the last two decades the Portage Creek area has devolved from a thriving industrial location with an emphasis on the paper mill industry to a blighted, largely abandoned area that is in the middle of two Kalamazoo neighborhoods – Milwood and Edison – that are home to thousands of Kalamazoo residents.

The Portage Creek Corridor Reuse Plan is important to the City of Kalamazoo, the residents of the Milwood and Edison neighborhoods, and to those in the region who may benefit from new jobs, housing, or recreational opportunities in the Portage Creek Corridor (Figure 1-1).

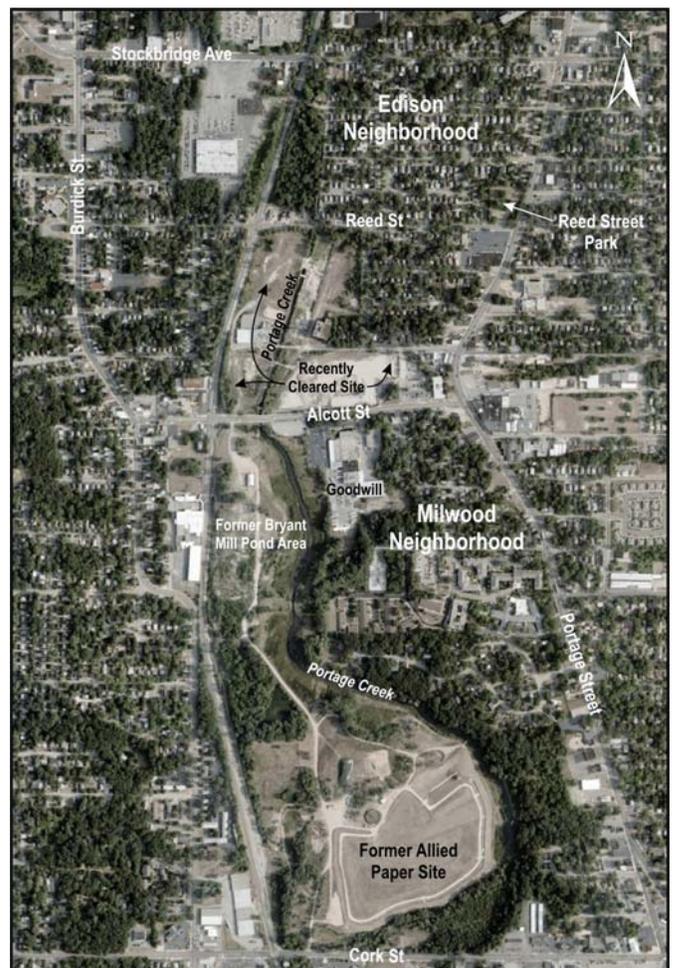
The City of Kalamazoo has retained The Corradino Group of Michigan to prepare the plan. The planning process includes outreach to the community and coordination with ongoing analyses being conducted by the United States Environmental Protection Agency (EPA) of the former Allied Paper Superfund site.

The project is being conducted with the support of a Steering Committee, whose role is to provide input throughout the process.

The planning for this effort is expected to take about six months (Figure 1-2) and involves the following tasks:

- Task 1: Determine Environmental Feasibility;
- Task 2: Perform Generalized Market Analysis;
- Task 3: Conduct Public and Stakeholder Involvement; and,
- Task 4: Develop Portage Creek Corridor Reuse Plan.

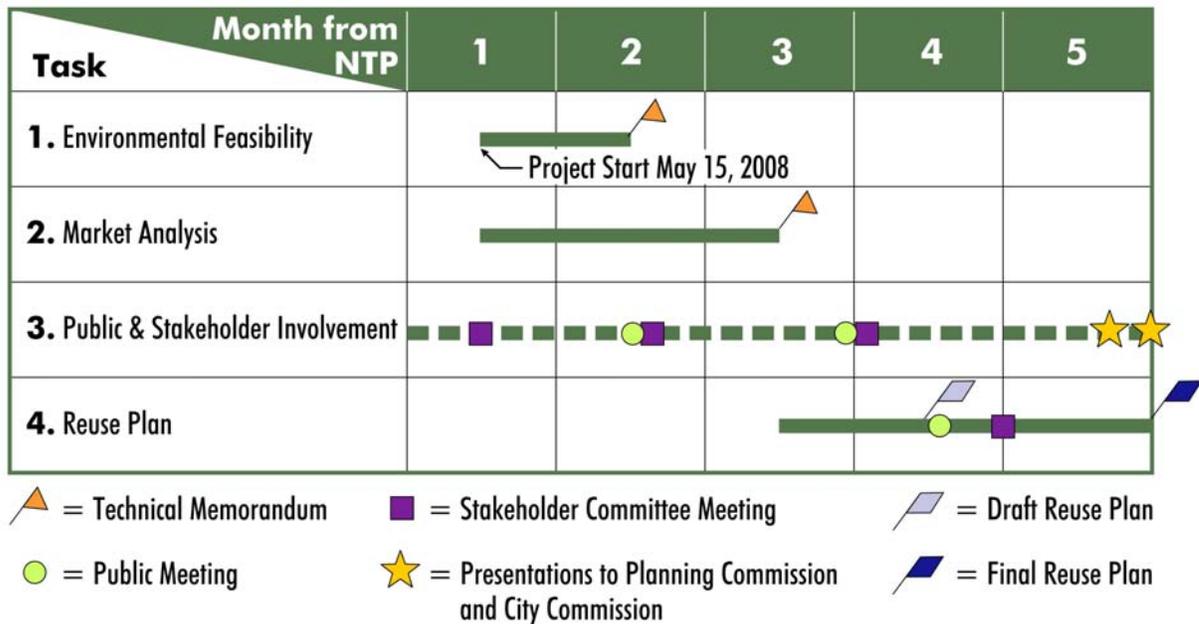
Figure 1-1
Portage Creek Corridor



This report presents a summary of the work that has been done to date by the City, which includes a detailed analysis by the consultant firm of Fishbeck, Thompson, Carr & Huber, Inc.¹ that presents information on properties within the study area with potential environmental issues and their potential future uses.

This report and the assessment presented therein will be one of several factors involved in determining potential reuse. These will include other factors such as market conditions, availability of public funds, public input and the findings of the ongoing Allied Paper Superfund process.

Figure 1-2
Project Schedule



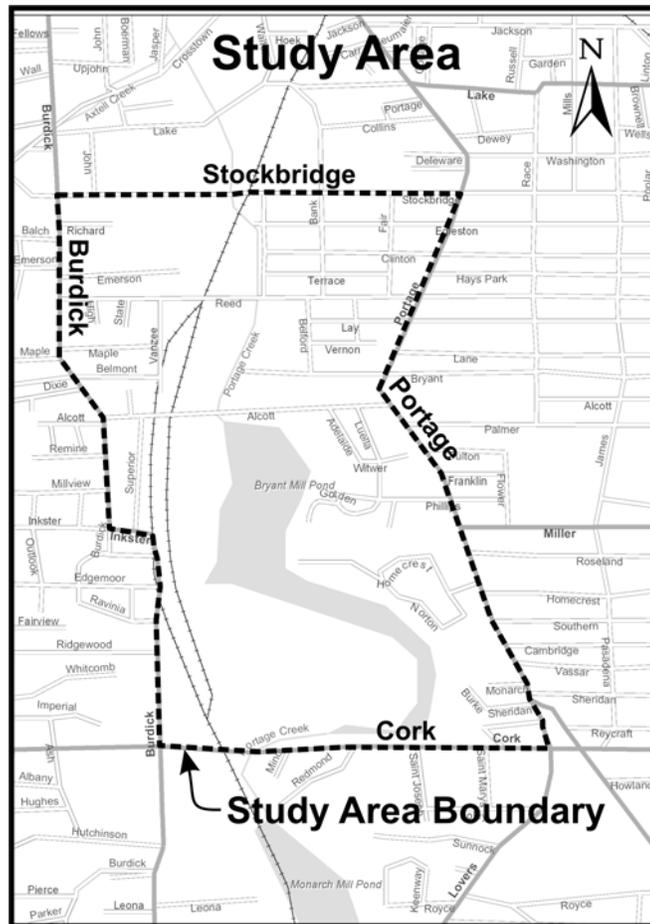
¹ Existing Conditions Report, Fishbeck, Thompson, Carr & Huber, Inc., prepared for the City of Kalamazoo, 2008.

2. Review of Existing Conditions Analysis

2.1 Overview of Report

This section presents an assessment of conditions in the study area as reflected in the Existing Conditions Report prepared by Fishbeck, Thompson, Carr & Huber, Inc. (FTC&H).² FTC&H was retained by the City to identify properties with known or suspected environmental issues in the study area (Figure 2-1) and to evaluate their future potential use as residential, commercial, industrial or green space.

Figure 2-1
Project Study Area



² Ibid.

Table 2-1 presents a summary of information presented in the report. Thirty-three sites, ranging from quarter-acre size lots to the 95-acre Allied Paper property, were examined in the analysis. These sites were included in the analysis, regardless of size or current land use, because they had known or suspected environmental contamination issues.

More than 100 acres in the southern part of the corridor (the Allied Paper and Panelyte properties) have soil and groundwater contamination from polychlorinated biphenyls (PCBs) and other contaminants (see Figure 2-2). PCBs have also been detected in surface water, sediments and fish tissue from Portage Creek. These properties are being investigated and remediated by Michigan Department of Environmental Quality (MDEQ) and EPA. According to the Existing Conditions Report, these properties have a low potential for residential, commercial or industrial land use. Additional information regarding the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund site is presented in Section 2.2.



A view of Portage Creek.

The Panelyte Property is a 22-acre vacant industrial site that is adjacent to the Allied Paper site. Environmental investigations are currently being conducted to define the extent of soil and groundwater contamination from PCBs, metals and volatile/semivolatile organic compounds. Land use/activity restrictions will likely be required. This property could be used as commercial or industrial land but would require a high level of effort. The report suggests that it could be used as green space with a low level of effort.

An eight-acre site owned by Lyondell Chemical Company is located immediately north and adjacent to the Panelyte site. Parts of this property along Portage Creek have been impacted by PCBs and are part of either the Allied Paper Superfund site Operable Unit 1 (OU1) or OU5. The report indicates green space as the highest land use potential but also suggests that it could be well-suited for industrial if combined with the adjacent Panelyte property. A high level of effort would be required to use this site for residential.

A 5.2-acre site owned by Strebtor, Inc. is situated to the west of the Lyondell Chemical site. Contaminated groundwater at this site is being cleaned up by a responsible party with MDEQ oversight. Soil impacts will likely require capping/excavation. According to the report, the highest uses of the site with the lowest level of effort are commercial or industrial.

**Table 2-1
Summary of FTC&H Existing Conditions Analysis**

Property	Size (Acres)	Current Use	Environmental Issues	Best Potential
107 E. Cork	0.63	Commercial	Yes	Commercial
222 E. Alcott	0.78	Commercial/Residential	No	Residential/Commercial
223 E. Alcott	1.28	Commercial	No	Commercial/Industrial
322 Stockbridge	14.05	Commercial	Yes	Commercial/Industrial
400 Bryant	1.62	Industrial	Yes	Commercial/Industrial
403 Reed	0.14	Commercial	Yes	Residential/Commercial
420 E. Alcott	14.03	Industrial/Commercial	Yes	Commercial/Industrial
422 Stockbridge	0.23	Commercial/Residential	No	Residential/Commercial
423 Reed/315-405-505 E. Alcott	31.56	Vacant	Yes	Commercial/Industrial/ Green Space
500 Phillips	3.20	Industrial	Yes	None Identified
504/512 E. Alcott	2.16	Industrial	No	Commercial
823 E. Cork	0.46	Commercial	Yes	Commercial
839 Monarch	5.80	Vacant	No	Residential/Green Space
1808 Portage	0.44	Vacant/parking lot	Yes	None Identified
1809 S. Burdick	0.28	Residential/Retail	Yes	Residential/Commercial
1908 Portage	0.24	Vacant	Yes	Residential/Commercial/ Green Space
2006 Portage	0.28	Commercial	Yes	Commercial
2030 Portage	1.85	Non-profit/Commercial	No	Commercial
2045 S. Burdick	0.27	Commercial	Yes	Commercial
2103 S. Burdick	0.19	Residential/Commercial	Yes	Residential/Commercial
2104 Portage	0.42	Commercial	Yes	Commercial
2305 Superior	5.22	Industrial (vacant warehouse)	Yes	Commercial/Industrial
2403 S. Burdick	22.47	Vacant	Yes	Commercial/Industrial/ Green Space
2706 Portage	0.90	Commercial	Yes	Commercial
2720 Portage	6.20	Vacant	Yes	Green Space
2724 Portage	0.18	Commercial	Yes	Commercial
2918 Portage	0.15	Non-profit Commercial	Yes	Commercial
2922 Portage	0.16	Commercial	Yes	Commercial
3003 S. Burdick	4.29	Commercial	Yes	Commercial/Industrial
3130 Lovers Lane	0.31	Commercial	Yes	Commercial
303, 401, 425, 455, 501, 525, and 603 E. Cork	95.00	Vacant (contaminated materials landfill)	Yes	Green Space
314, 316, 320 and 350 E. Alcott	8.08	Vacant	Yes	Green Space/Commercial
1015 E. Cork	0.13	Commercial	Yes	Residential/Commercial

1. Potential uses are those listed as High in the Existing Conditions Report except for Green Space where both High and Medium are referenced. If there are no High uses identified then Medium uses are shown. If all potential uses are rated as Low than None Identified is listed in this table.
2. The most prevalent environmental issues are the presence of possible underground storage tanks on properties where it has not been determined whether they have been removed.
3. The evaluation of the best potential use took into account the level of effort that would be required for implementation. For example, if it was determined that a property is currently developed as commercial it was deemed less likely to be suitable for another purpose because of the need to acquire and remove the existing structures.
4. Total acreage of the sites identified for possible redevelopment is 222.90.

Source: The Corradino Group

The Performance Paper site is a 31.6-acre site located north of Alcott Street. This vacant industrial site has known soil and groundwater contamination from metals and volatile/semivolatile organic compounds. Several underground storage tanks (USTs) have been removed at this site. Portage Creek runs through this property and its sediments are also impacted. Some of the parcels that comprise this site are owned by the City of Kalamazoo, which has demolished a former power house structure that was located on the east side of the property. This site has a high potential use as commercial,



Former power plant, now owned by the City and being demolished.

industrial or green space, but a higher level of effort would be required for use as commercial or industrial. The City recently obtained approval for a stream relocation plan and is currently awaiting funding to construct. Additional information regarding this plan is presented in Section 3.

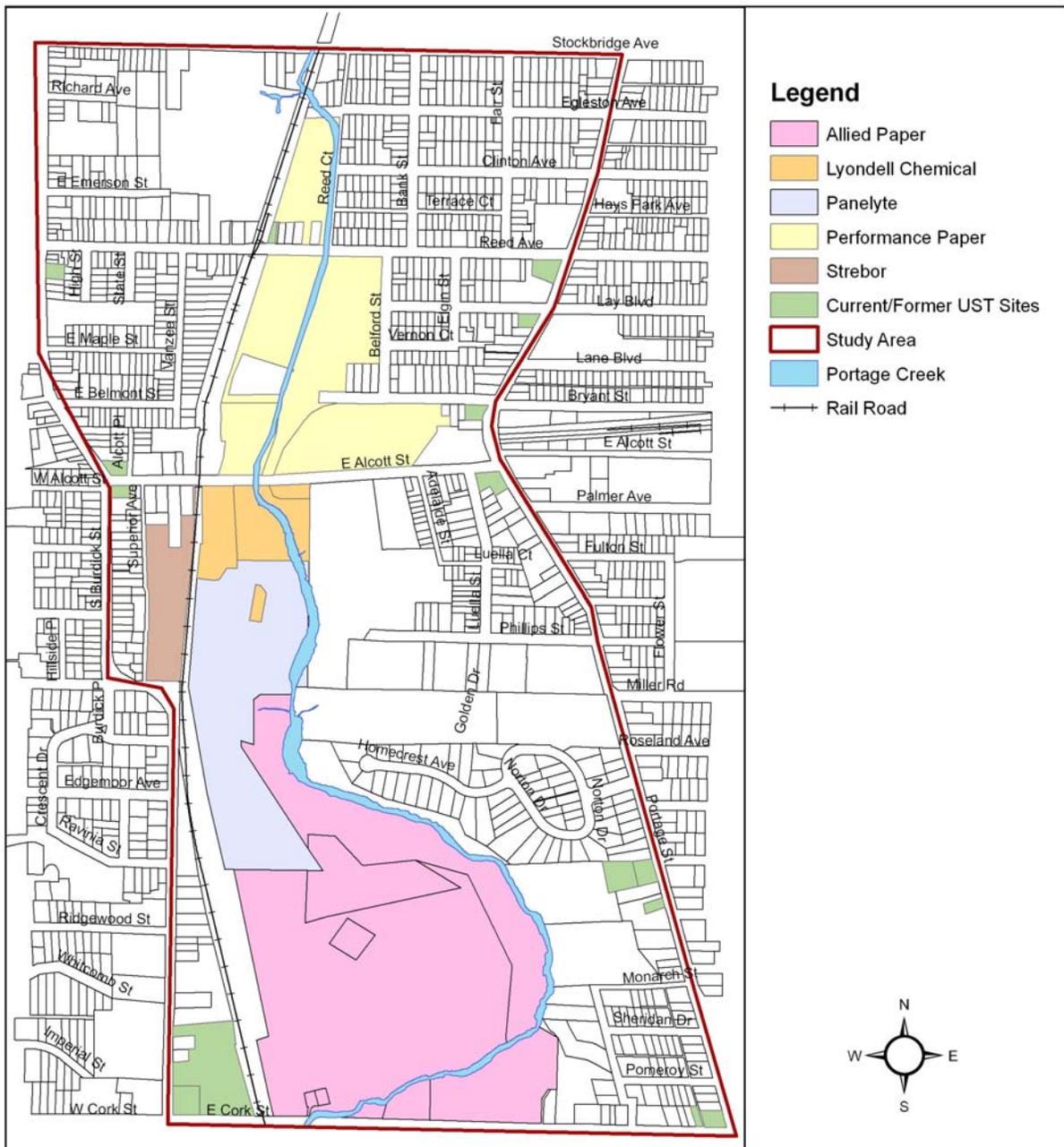
Nearly half of the sites examined in the report are current or former UST sites and include four active gas station sites and ten former gas station sites (see Figure 2-2). These sites are typically half-acre lots or smaller and are located on the periphery of the study area along the mostly-commercial arterials (Portage, Cork and Burdick Streets). A few of these are known leaking UST (LUST) sites that are currently being addressed by parties under MDEQ oversight and at least two of these sites have land use restrictions and/or groundwater use prohibitions. The report indicates that the highest potential use for these sites is commercial, and that use of these sites for residential use would require a high level of effort to assess and/or clean up. These sites are generally too small for industrial use and conversion to green space would remove them as tax revenue sources.

Two sites, Treasure Quest at 2922 Portage and the First Presbyterian Church Health Clinic at 2918 Portage are former automotive repair sites, and have not been assessed for possible contamination. The laundromat at 823 E. Cork has known soil impacts from a dry cleaning solvent. Because of documented or suspected contamination and their small size (<0.5 acres), the highest use of these sites is also commercial.

Two medium-sized tracts located in the southeast part of the study area, 2720 Portage and 839 Monarch, are zoned residential. The property at 839 Monarch is vacant and has no known contamination issues. It was rated high for residential use in the Existing Conditions Report. The adjacent tract which borders Portage Creek to the west has documented PCB soil and sediment contamination along its flood plain. The report also indicates that the site may have groundwater contamination from an adjacent auto repair facility and that historical photographs show disturbed soil at the site. This property was rated medium for residential, commercial and industrial and high for green space.

The Existing Conditions Report indicated no documented contamination of the following sites: 504/512 E. Alcott (Supply Co.); 2030 Portage (Living Ways Family Health Center); 222 E. Alcott (upholstery/furniture repair/residence); 223 E. Alcott (roofing and home building materials store); and, 422 Stockbridge (Keystone, Inc. offices). These sites range in size from about 0.20 to 14.05 acres. The potential future land uses for these sites include residential, commercial, industrial and green space, although some of these sites may not be suited for industrial use because of their small size.

Figure 2-2
Map of Key Properties



2.2 Allied Paper Superfund Site

This approximately 95-acre site comprises most of the Allied Paper OU1. Paper manufacturing operations ceased at this site in the late 1970s and early 1980s and no active mills remain on site. Investigation and cleanup of PCBs and other paper mill residual contaminants began in 1998 with an interim response measure (IRM), which included the following:

- Excavation of approximately 146,000 cubic yards of PCB-containing sediment, residuals and soils from the former Bryant Mill Pond and placement of these materials into an on-site “landfill,” which was later capped.
- Installation of approximately 2,600 linear feet of sheetpile along the west bank of Portage Creek.
- Installation of a groundwater recovery and treatment system.
- Removal of residuals within the floodplain on the east side of Portage Creek and placement under the landfill cap.
- Removal of several hundred cubic yards of soil containing residuals from locations between the sheetpile and Portage Creek and placement under the landfill cap to minimize the potential for PCB releases to Portage Creek.

In March 2008, an EPA-approved Remedial Investigation (RI) Report³ for Allied Paper OU was published. Some of the findings of the RI are as follows:

- Soils/sediments contamination exceeding background/residential and other potentially applicable soil criteria (commercial/industrial and ecological) exists at the site and that contaminated residuals have also migrated onto adjacent residential/commercial areas.
- PCBs are present in the groundwater and seeps at the site and are still being transported to Portage Creek.
- Average PCB concentrations in surface water from Portage Creek from 2000 to 2006 are approximately two times higher downstream of the site versus upstream locations.
- PCB concentrations in fish tissue samples from Portage Creek exceed some health consumption criteria.

The RI states that the Feasibility Study “should consider the current and future land uses . . . and determine whether an area poses an actual or potential risk to human health and the environment.” The RI also suggests that areas that will be restricted to industrial uses should be evaluated with respect to the State’s health-based soil criteria for industrial/commercial land uses and that areas zoned residential need to be evaluated using criteria for residential land use.

³ Remedial Investigation Report, Allied Paper, Inc. Operable Unit, Camp, Dresser and McKee, prepared for Michigan Department of Environmental Quality, March 2008.

The Feasibility Study is the next step in the Superfund process. It will be followed by Remedy Selection, which identifies cleanup levels and selects a site remedy. These are documented in a Record of Decision (ROD). After the ROD, the Superfund steps include Remedial Design, Remedial Action and Post Construction (i.e., operation, maintenance).

3. Evaluation of Possible Future Uses

3.1 Identified Future Reuses from Existing Conditions Report

The Existing Conditions Report identified possible future reuses of each site. These evaluations did not represent recommendations but rather "first-cut" assessments based on FTC&H's knowledge of the site. For each site, FTC&H assigned a High, Medium, or Low for each land use category and an estimate of the level of effort required to achieve each land use. High, Medium, and Low were used to indicate the level of effort. Sites that had existing viable buildings were judged likely to remain in a similar land use.

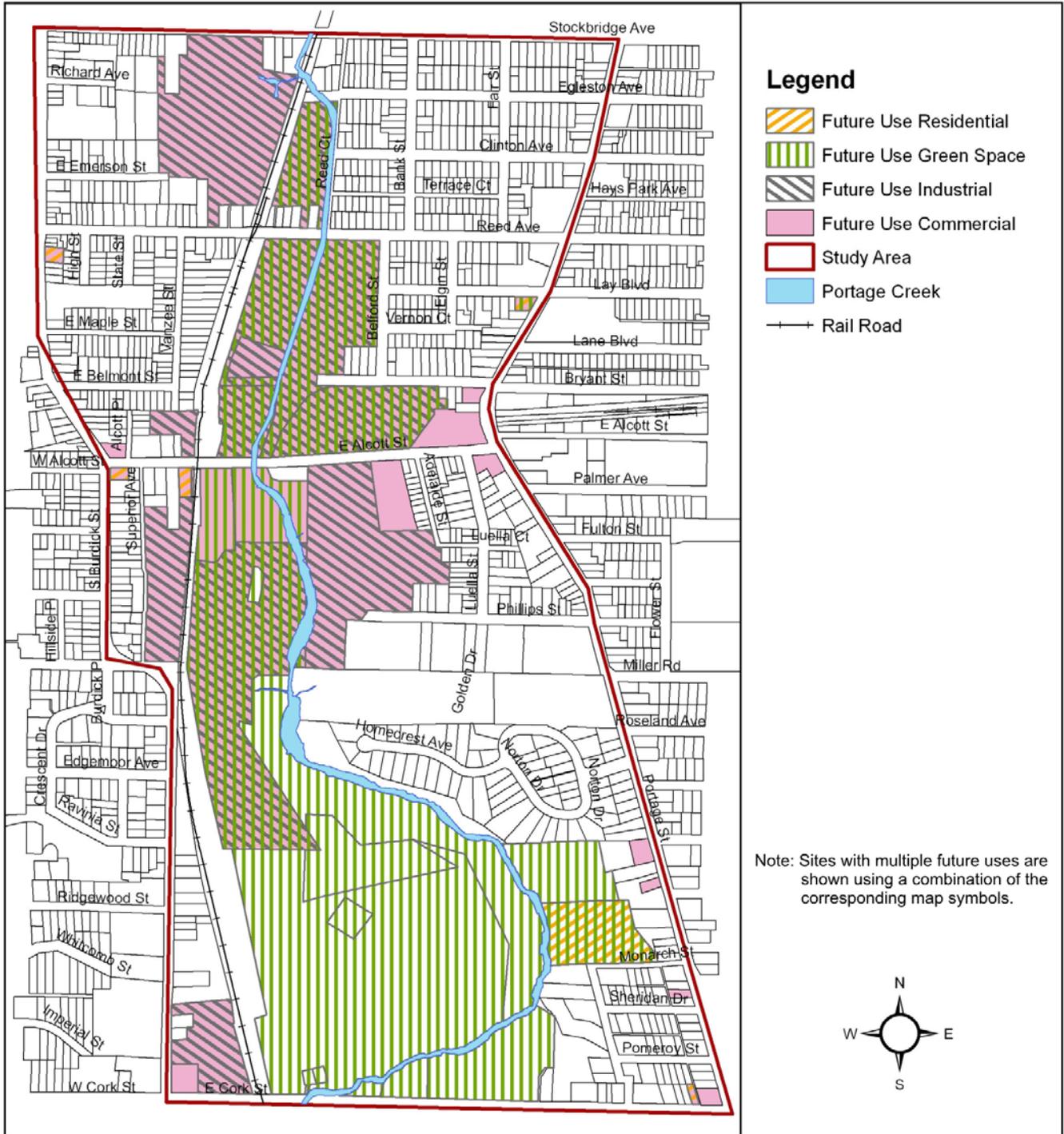
Figure 3-1 presents a map that shows the future land use in the corridor if the identified best potential uses in the FTC&H report were put into place. It should be emphasized that these uses represent "first-cut" assessments and that they may not consider actions such as severing-out contaminated areas from otherwise non-impacted properties or combining parcels to create a more useable site for specific uses.

An example using both these concepts involves the two adjoining sites at 2720 Portage and 839 Monarch. The site at 2720 Portage has documented PCB contamination from the Allied Paper site in the floodplain along its western border. Additionally, the site may have groundwater lead contamination from an adjacent automotive repair shop. Depending on the findings of future assessment at this site, the non-contaminated portion of this site could potentially be combined with the neighboring site (839 Monarch) to create a 10±-acre site that could be used for residential and/or green space.

As part of the discussions with the project Steering Committee, there is a strong sense that the recreational possibilities of the corridor be explored both in their own right and as a stimulus to attracting additional office, commercial, and residential development. For example the Allied Paper site could potentially be used for a variety of "green" uses including sports fields, nature areas/trails, etc. Although not absolutely impossible, it is unlikely that there would be commercial or residential development on the property.

The potential future uses of this site will depend on the potential/actual risks to human health and the environment and selection of cleanup criteria, which will be determined during the upcoming Feasibility Study. It will be important for the City and its residents to provide input to EPA/MDEQ during the Feasibility Study/Remedy Selection process to help them decide what remedial actions need to be undertaken at the Allied Paper site. Secondly, even though it will take several years to complete remedial activities, coordination with EPA/MDEQ can favorably impact the timing and/or phasing of remedial construction activities.

Figure 3-1
Possible Future Use of Properties in the Study Area
with Known or Suspected Environmental Contamination



3.2 Performance Paper/Portage Creek Relocation Plan

The City of Kalamazoo's Brownfields Redevelopment Authority completed acquisition of the Performance Paper site in 2005 and demolished all of the aboveground structures at the site. The second phase of the project includes the relocation of approximately 1,380 feet of Portage Creek between Alcott Street and Reed Avenue and demolition of the Bryant Street bridge. In March 2008, the City received a Part 31 Floodplain/Water Resources Protection and Part 301 Inland Lake and Streams Permit for the relocation project. The main components of this plan include:

- Excavation and relocation (on site) of approximately 37,800 cubic yards of soil to create a new meandering channel;
- Removal and disposal of concrete and metal from the existing channel;
- Stream bank stabilization;
- Creation of riffles using riprap; and,
- Replace/modify storm drainage fixtures.

The City is expected to begin construction when funding becomes available. The plan is intended to improve aquatic habitat and restore the stream to a more natural state. When completed, the relocation work is anticipated to create additional public interest in the area and facilitate development of adjacent and nearby vacant properties.

3.3 Other Opportunities for Reuse for Brownfield Eligible Sites

The Existing Conditions Report identified about ten "Brownfield Plan Eligible" properties within the study area. These include the Panelyte (22.5 acres), the Lyondell Chemical (8.1 acres) properties, and the 5.2-acre vacant warehouse site at 2305 Superior. The Panelyte site is listed as a "future project" on the City's list of Brownfield Redevelopment Initiative sites.

4. Next Steps

A public meeting will be held on June 24 to introduce the Portage Creek Corridor Reuse Plan to the public and to discuss the findings of the environmental review conducted as part of Task 1. Then, the consultant will focus on a market study to determine what is the real potential in terms of attracting development for the corridor.

Following the market analysis work, a second public meeting will be held in mid-summer. At this meeting, the public will be briefed on the likelihood of various combinations of land uses in the corridor.

As noted earlier in this report, a Feasibility Study/Remedy Selection is being conducted for the Allied Paper Superfund site. The City is coordinating the Portage Creek Corridor planning effort with EPA. The Portage Creek Reuse Plan will likely be completed before a final remedy for the Allied Paper site is selected. As a result, the reuse plan will include the best available information from EPA and its consultant regarding likely uses of this site.

Appendix B

Technical Memorandum No. 2 Generalized Market Analysis

DRAFT

Portage Creek Corridor Reuse Plan

Generalized Market Analysis

Submitted to:

City of Kalamazoo, Michigan

Submitted by:

The Corradino Group of Michigan, Inc.

In association with:

Integra Realty Resources

October 2008

APPENDIX B TO FINAL REPORT

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1. Introduction

Over several decades, the Portage Creek area has changed from a thriving industrial location with an emphasis on the paper mill industry to a blighted, largely abandoned industrial area that is in the midst of two Kalamazoo neighborhoods – Milwood and Edison – that are home to thousands of Kalamazoo residents.

The Portage Creek Corridor Reuse Plan is important to the City of Kalamazoo, the residents of the Milwood and Edison neighborhoods, and to those in the region who may benefit from new jobs, housing, or recreational opportunities in the Portage Creek Corridor (Figure 1-1).

The City of Kalamazoo has retained The Corradino Group of Michigan to prepare the plan. The planning process includes outreach to the community and coordination with ongoing analyses being conducted by the United States Environmental Protection Agency (EPA) of the former Allied Paper Superfund site.

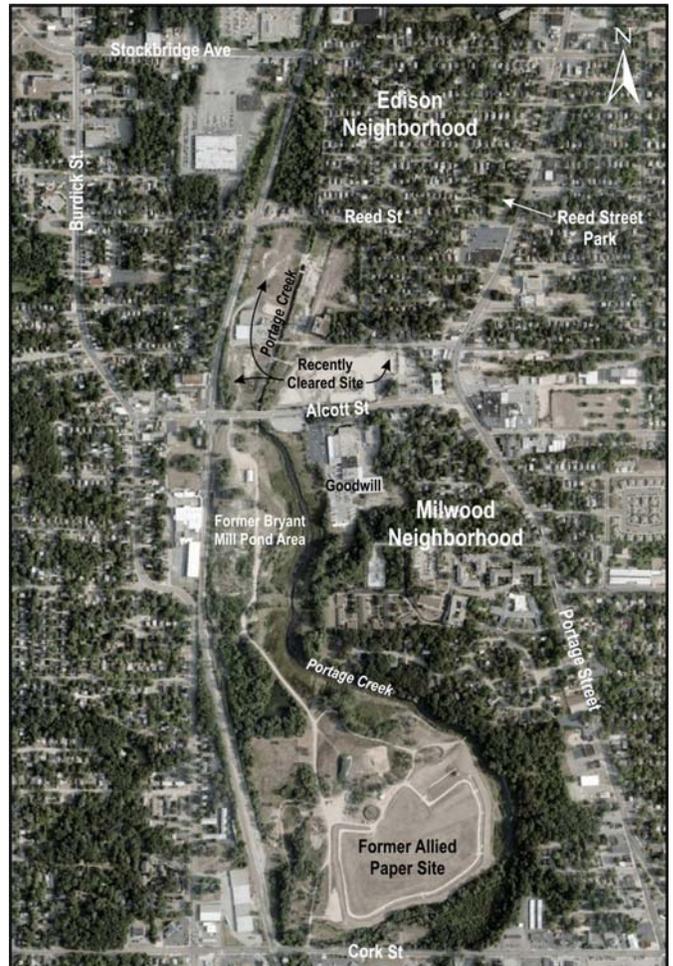
The project is being conducted with the support of a Steering Committee, whose role is to provide input throughout the process.

The plan involves the following tasks:

- Task 1: Determine Environmental Feasibility;
- Task 2: Perform Generalized Market Analysis;
- Task 3: Conduct Public and Stakeholder Involvement; and,
- Task 4: Develop Portage Creek Corridor Reuse Plan.

This report presents the general market analysis performed for the plan. This work included analysis of data such as historic trends, building permits and the like, interviews with various public, policy, and private sector individuals who understand the local market conditions, and a review of the potential for the area given its location and possibility as a developable property.

Figure 1-1
Portage Creek Corridor



This report and the analysis presented herein will be one of several factors involved in determining potential reuse. Other factors, such as environmental feasibility, availability of public funds, public input, and the findings of the ongoing Allied Paper Superfund process will also be considered.

2. Study Area Characteristics

This section presents discussion of the demographic and general market characteristics of the study area (Figure 2-1) and the Kalamazoo/Portage metropolitan statistical area (MSA) region (Figure 2-2).

Figure 2-1
Project Study Area

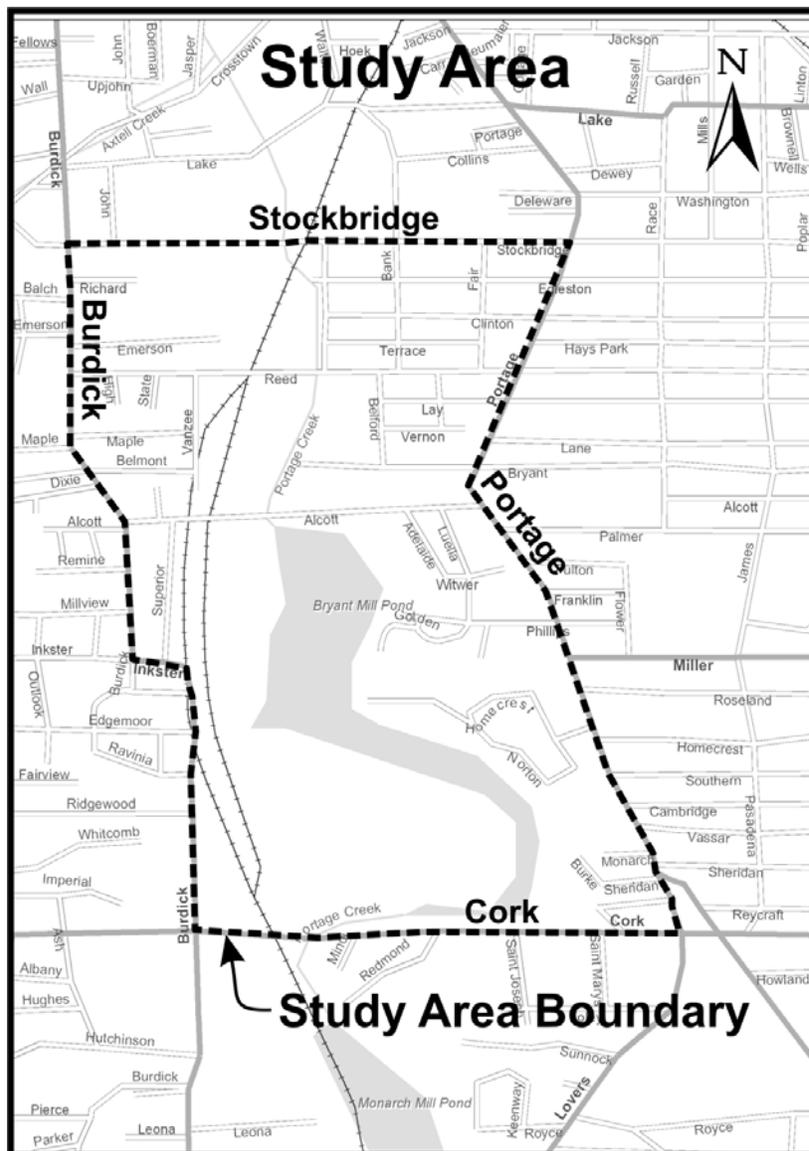


Figure 2-2
Kalamazoo-Portage Metropolitan Statistical Area



* Note: The Kalamazoo-Portage MSA and HMA are the same geographic area of Kalamazoo and Van Buren counties.

2.1 Demographics

The Portage Corridor Reuse Plan study area is comprised of three census tracts. The statistical information from these has been used to provide background information on the area and is provided in Appendix A. Some key data items for the City and the study area are shown in Table 2-1. The City of Kalamazoo has approximately 77,000 residents as of the 2000 U.S. Census as opposed to 315,000 in the Kalamazoo-Portage MSA (Figure 2-2), which encompasses Kalamazoo and Van Buren counties. About 2,800 people live in the study area for the project as defined in Figure 2-1.

**Table 2-1
Demographics Summary**

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Population	2,788	100.0	77,092	100.0	238,603	100.0	314,866	100.0
Race								
White alone	1,844	66.1	53,502	69.4	199,058	83.4	263,439	83.7
Black or African American	576	20.7	15,060	19.5	21,548	9.0	25,538	8.1
American Indian and Alaska Native	30	1.1	443	0.6	1,028	0.4	1,556	0.5
Asian alone	56	2.0	1,626	2.1	4,269	1.8	4,467	1.4
Native Hawaiian and Other Pacific Islander	0	0.0	187	0.2	211	0.1	228	0.1
Some other race	8	0.3	187	0.2	430	0.2	462	0.1
Two or more races	169	6.1	2,725	3.5	5,583	2.3	6,938	2.2
Hispanic or Latino	105	3.8	3,362	4.4	6,476	2.7	12,238	3.9
Age								
19 years and under	859	30.8	22,771	29.5	68,125	28.6	91,599	29.1
20 to 64 year	1,424	51.1	46,589	60.4	143,437	60.1	186,844	59.3
65 years and over	505	18.1	7,732	10.0	27,041	11.3	36,423	11.6
Persons in Households								
Family households	2,044	73.3	44,838	58.2	179,333	75.2	244,219	77.6
Nonfamily households	531	19.0	22,706	29.5	48,121	20.2	57,575	18.3
Household Size								
1-person household	372	37.0	10,226	34.8	26,243	28.1	32,563	26.8
2-person household	238	23.7	9,583	32.6	32,755	35.0	42,351	34.8
3-person household	105	10.4	4,258	14.5	14,109	15.1	18,768	15.4
4-person household	119	11.8	2,951	10.0	12,399	13.3	16,632	13.7
5-person household	73	7.3	1,430	4.9	5,302	5.7	7,291	6.0
6-person household	84	8.4	650	2.2	1,942	2.1	2,699	2.2
7-or-more-person household	14	1.4	317	1.1	745	0.8	1,229	1.0
Total	1,005	100.0	29,415	100.0	93,495	100.0	121,533	100.0
Transportation to Work								
Car, truck, or van:	936	91.3	30,906	85.6	108,725	92.0	141,625	92.6
Drove alone	750	73.2	26,862	74.4	98,095	83.0	126,824	82.9
Carpooled	186	18.1	4,044	11.2	10,630	9.0	14,801	9.7
Public transportation	42	4.1	1,138	3.2	1,578	1.3	1,634	1.1
Motorcycle	0	0.0	9	0.0	42	0.0	56	0.0
Bicycle	0	0.0	182	0.5	303	0.3	413	0.3
Walked	27	2.6	2,514	7.0	3,460	2.9	4,107	2.7
Other means	0	0.0	216	0.6	433	0.4	593	0.4
Worked at home	20	2.0	1,157	3.2	3,691	3.1	4,567	3.0
Total	1,025	100.0	36,122	100.0	118,232	100.0	152,995	100.0
Travel Time to Work								
Less than 20 minutes	724	70.6	24,860	68.8	66,791	56.5	81,699	53.4
Household Income								
Less than \$25,000	362	36.0	12,216	41.5	26,674	28.5	34,917	28.7
\$25,000 to \$74,999	521	51.8	13,324	45.3	46,693	49.9	61,879	50.9
\$75,000 to \$149,999	122	12.1	3,185	10.8	16,633	17.8	20,826	17.1
\$150,000 or more	0	0.0	690	2.3	3,495	3.7	3,911	3.2
Household Poverty Status								
Income in 1999 below poverty level	179	17.8	6,434	21.9	10,799	11.6	13,791	11.3
Housing Tenure								
Owner occupied	559	50.9	14,060	44.2	61,484	61.9	83,737	62.9
Renter occupied	447	40.7	15,351	48.3	31,995	32.2	37,724	28.3

Source: U.S. Census Bureau, Census 2000

Slightly less than 70 percent of the population in the city was reported as White in the 2000 census while about 20 percent were reported as Black and 4.5 percent Hispanic or Latino. In the study area, 66 percent of the population is White with slightly less than 21 percent Black and about four percent Hispanic or Latino.

Twenty-nine percent of the city population is under age 19 and about 10 percent is over 65 with 60 percent between ages 20 and 64. The study area has a population with more youth, about 31 percent under age 19 and more elderly, about 18 percent.

The study area has a significantly higher number of residents living in family households than the city (73% to 58%). The study area also has fewer one-person households. These data, combined with the age-related data, suggests more young families live in the study area.

About 91 percent of the people in the study area drive or carpool to work as opposed to nearly 86 percent in the city and 92 percent and 92.6 percent in the county and MSA, respectively. Very few people in the study area reported walking or bicycling to work.

Most people in the study area, city, county and MSA have a travel time to work of less than 25 minutes. In the study area, nearly 71 percent have a travel time of less than 20 minutes.

In terms of household income, the study area has a similar percentage of households in the \$25,000 to \$74,999 range to the county and MSA, but has a higher percentage of households in the lower income range and a lower percentage in the higher income range.

The study area has higher levels of home ownership than the city (51% to 44%). Both the county and MSA have higher levels of home ownership than the study area and city, 62 percent and 63 percent, respectively.

2.2 General Market Characteristics

Kalamazoo has a diverse set of employers (Table 2-2). Some of the larger employers are Pfizer Corporation, with 4,300 employees, Bronson Healthcare Group, with 3,400 employees, Borgess Medical Center with 2,700 employees, and Western Michigan University with 2,600 employees. Overall employment among major employers in the city is over 30,000 employees. Employment in Kalamazoo has declined from a high of 40,550 (2004) to 37,583 as of March 2008 (Table 2-3). Much of this job loss occurred between 2004 and 2005.¹

¹ Final Official Statement dated June 10, 2008, City of Kalamazoo, County of Kalamazoo, State of Michigan, 2008 Capital Improvement Bonds Report and the Office of Labor Market Information.

Table 2-2
Kalamazoo Area Major Employers

Company	Employees
Pfizer Corporation	4,300
Bronson Healthcare Group	3,400
Borgess Medical Center	2,685
Western Michigan University	2,657
Kalamazoo Public Schools	2,200
Stryker Corporation	1,750
National City Bank	1,500
Meijer, Inc.	1,500
MPI Research	1,400
Portage Public Schools	1,261
Summit Polymers	1,200
United State Postal Service	1,049
County of Kalamazoo	1,000
Kalamazoo Valley Community College	915
Eaton Corporation	832
Target Regional Distribution	750
City of Kalamazoo	745
State Farm Auto Claims Center	698
Parker Hannefin Corporation	602
AT & T	480
MSU Center for Medical Studies	455
Graphic Packaging International	450
Flowserve FSD Corporation	440
Kalamazoo College	338
Designware (an American Greetings Co.)	325
Total	32,932

Source: City of Kalamazoo

Table 2-3
City of Kalamazoo Labor Statistics

	2003	2004	2005	2006	2007	2008 ^a
Employed	40,050	40,550	37,789	37,464	37,622	37,583
Unemployed	3,450	3,475	3,007	2,902	2,953	2,997
Labor Force	43,525	44,025	40,796	40,366	40,575	40,580
Unemployed as Percent of Labor Force ^b	8.0%	7.9%	7.4%	7.2%	7.3%	7.4%

^a As of March 2008

^b Totals and percentages may differ due to rounding by the Office of Labor Market Information – Michigan Department of Career Development.

Source: Office of Labor Market Information – Michigan Department of Career Development

As noted in the city's previously referenced report,² Kalamazoo provides support for business expansion through tax abatement programs and policies. Businesses are reported to have invested

² Ibid.

over \$148 million in real and personal property under Industrial Facilities Exemption Certificates in the last 12 years. The city also uses a wide range of economic development tools such as PA 328 personal property tax exemptions, Michigan Business Tax credits for the redevelopment of Brownfield sites (which is a state program), and the designation of tax-exempt Renaissance Zones.

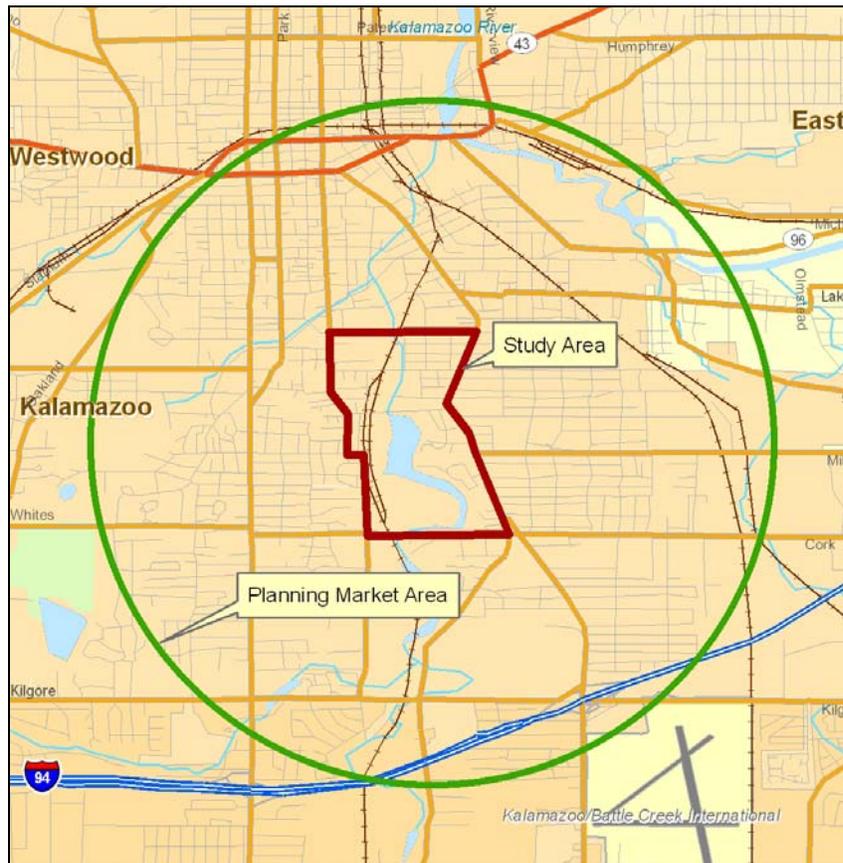
The city has an effective and entrepreneurial Brownfields Redevelopment program. The city has undertaken 38 Brownfield redevelopment projects since 1996, representing more than \$170 million in private investment and the creation of over 1,250 jobs. Recent activities associated with the Brownfields program include:

- The opening of the \$27 million mixed-use facility including a 14-screen multiplex cinema (Rave Theatres), retail, residential and public parking, resulting in the creation of an estimated 90 to 120 jobs;
- The opening of the new Stryker Headquarters, a \$16.7 million office facility;
- The completion of the Jack Coombs Trailway, an 1,800 linear feet public green space area overlooking the Kalamazoo River;
- The expansion of Mackenzie's Bakery, a "second generation" Brownfield project with new investment of approximately \$300,000; and,
- The opening of the Davis Creek Business Park on the reclaimed site of a formerly abandoned oil refinery.
- The expansion of Fabri-kal with a new state-of-the-art design and manufacturing facility (a \$141 million project).

3. Market Analysis

This portion of the analysis reviews the statistical characteristics of the Kalamazoo Housing Market Area (HMA), Kalamazoo County, and the planning market area to identify distinguishing characteristics. The HMA is made up of Kalamazoo County and Van Buren County, as is the MSA. These characteristics will point to the needs of the study area and land uses that are compatible with the physical and environmental limitations of the land. The planning market area (Figure 3-1) for this analysis is defined as a two-mile radius around the Portage Creek study area with the center being 500 Phillips Street. It should be noted that this is larger than the project study area. This was done because, from a market perspective, it was decided that the larger area would be a more accurate reflection of the residential and business activity upon which future development would be based.

Figure 3-1
Planning Market Area



3.1 Labor Force and Employment

Table 3-1 is a profile of the Labor Force and Employment characteristics of the Kalamazoo/Portage HMA and the planning market area between 1990 and 2007. Between 1990 and 2000, employment in the HMA and the planning market area grew by 15.2 percent and 13.0 percent, respectively. Between 2000 and 2008, both the HMA and the planning market area experienced a decline in employment. The planning market area experienced an 11.5 percent decline in employment, while the HMA experienced a lesser rate of decline of 5.2 percent.

**Table 3-1
Non-farm Labor Force and Employment
Kalamazoo-Portage HMA and Portage Creek Planning Market Area
1990 to 2008**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Kalamazoo-Portage HMA										
Labor Force	154,000	151,000	152,000	156,000	160,000	159,000	159,000	162,000	163,000	166,000
Employment	145,000	141,000	142,000	147,000	152,000	152,000	153,000	156,000	159,000	161,000
Unemployment	9,000	10,000	10,000	9,000	8,000	7,000	6,000	6,000	4,000	5,000
Rate (%)	5.8%	6.6%	6.5%	5.8%	5.0%	4.4%	3.7%	3.7%	2.5%	3.0%
Planning Market Area										
Labor Force	20,967									
Employment	19,108									
Unemployment	1,859									
Rate (%)	8.9%									

	2000	2001	2002	2003	2004	2005	2006	2007	2008*
Kalamazoo-Portage HMA									
Labor Force	173,000	171,000	168,000	170,000	172,000	175,000	176,218	176,866	174,247
Employment	167,000	164,000	160,000	160,000	162,000	165,000	166,497	166,998	158,241
Unemployment	6,000	7,000	8,000	10,000	10,000	10,000	9,721	9,868	16,006
Rate (%)	3.5%	4.1%	4.8%	5.9%	5.8%	5.8%	5.5%	5.6%	9.2%
Planning Market Area									
Labor Force	25,574								22,634
Employment	21,588								19,650
Unemployment	3,986								2,984
Rate (%)	15.6%								13.2%

*The data for Kalamazoo-Portage HMA for 2008 is a prospective estimate, as opposed to the retrospective data of the previous years, and was obtained from the Site To Do Business.

Note: U.S. Bureau of Labor revisions through the current date

Source: U.S. Bureau of Labor, Site To Do Business and Integra Realty Resource

As shown in Table 3-1, since 1990, the planning market area has experienced a higher rate of unemployment than that of the HMA. In 1990, the unemployment rate for the HMA was 5.8 percent as compared to 8.9 percent for the planning market area. Again in 2000, the rate of unemployment for the planning market area was 15.6 percent as compared to 3.5 percent for the HMA. Finally in 2008, it is estimated that the unemployment rate for the planning market area is 13.2 percent as compared with the 9.2 percent estimated for the HMA.

Table 3-2³ presents non-farm employment by industry for the Kalamazoo/Portage HMA for the years 1990 through 2007 (Table 3-2). Table 3-3 presents similar information for the planning market area for 2000 and 2008.

³ In Table 3-2, the total of office-related employment includes information, FIRE, services and public administration. Non-manufacturing totals include all other industries except manufacturing.

Table 3-2
Non-farm Employment (in thousands) by Industry
(by place of work)
Kalamazoo-Portage HMA
1990 to December 2007

Employment Sector	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total Nonfarm	128.8	129.7	131.9	133.7	136.6	139.7	141.3	142.3	143.8	146.2
Goods-producing	36.4	36.1	36.6	36.6	36.7	37.5	37.1	36.9	37.1	37.3
Construction	4.2	4.4	4.6	4.8	5.1	5.5	5.7	6.1	6.1	6.4
Manufacturing	32.1	31.7	31.9	31.8	31.6	32.1	31.4	30.8	31.0	30.9
Service-providing	92.4	93.6	95.3	97.1	99.9	102.2	104.2	105.4	106.7	108.9
Trade	18.2	18.3	18.7	19.1	19.5	20.0	20.3	20.1	19.9	20.7
Wholesale Trade	3.9	3.6	3.5	3.7	3.8	4.0	4.1	4.0	4.0	3.9
Retail Trade	14.3	14.7	15.2	15.4	15.7	16.0	16.2	16.1	15.9	16.8
Transportation & Utilities	2.5	2.5	2.6	2.6	2.7	2.8	3.0	3.2	3.5	3.6
Information	1.7	1.6	1.7	1.7	1.7	1.9	2.0	2.0	2.0	1.7
Financial Activities	6.1	6.2	6.3	6.4	6.4	6.4	6.6	6.6	6.5	6.7
Prof. & Business Services	9.7	10.5	11.0	10.9	12.0	12.1	12.3	13.0	14.0	13.9
Education & Health Services	14.8	14.9	15.2	16.0	16.8	16.8	16.7	16.6	16.3	16.7
Leisure & Hospitality	10.7	10.7	10.8	11.2	11.5	12.3	12.9	13.2	12.8	12.9
Government	23.2	23.3	23.4	23.4	23.2	23.6	23.9	24.1	25.2	26.2
Federal	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.6	1.7
State	9.5	9.4	9.5	9.3	8.9	9.1	9.0	9.2	9.7	10.4
Local	12.3	12.6	12.6	12.8	13.0	13.2	13.6	13.5	13.9	14.1
Total Office Related	158.6	160.8	163.7	166.7	171.5	175.3	178.6	180.9	183.5	187.0
Total Nonmanufacturing	96.7	98.0	100.0	101.9	105.0	107.6	109.9	111.5	112.8	115.3

Employment Sector	2000	2001	2002	2003	2004	2005	2006	2007	Change in Employment	
									2002-2007	2004-2007
Total Nonfarm	150.0	147.1	147.0	145.2	144.3	144.8	146.1	146.6	-0.4	2.3
Goods-producing	37.4	35.3	34.0	32.6	31.0	30.8	29.6	28.5	-5.5	-2.5
Construction	6.7	6.9	7.2	6.8	6.5	6.4	6.3	6.0	-1.2	-0.5
Manufacturing	30.7	28.3	26.8	25.9	24.5	24.4	23.3	22.5	-4.3	-2.0
Service-providing	112.6	111.8	113.0	112.6	113.3	113.9	116.5	118.1	5.1	4.8
Trade	21.1	20.8	21.2	22.1	21.6	21.8	24.6	25.0	3.8	3.4
Wholesale Trade	4.0	4.0	4.1	4.3	4.2	4.3	4.7	5.1	1.0	0.9
Retail Trade	17.1	16.8	17.1	17.8	17.4	17.5	16.0	15.9	-1.2	-1.5
Transportation & Utilities	3.8	3.9	3.9	3.9	3.9	3.9	3.9	4.0	0.1	0.1
Information	1.7	1.7	1.7	1.6	1.5	1.4	1.5	1.4	-0.3	-0.1
Financial Activities	6.9	7.1	7.4	7.5	7.6	7.9	7.8	7.9	0.5	0.3
Prof. & Business Services	14.5	13.5	13.7	13.7	14.1	14.4	15.5	15.8	2.1	1.7
Education & Health Services	17.5	17.7	18.7	19.0	19.8	19.9	21.5	21.8	3.1	2.0
Leisure & Hospitality	13.5	13.8	13.9	14.1	14.9	14.9	15.5	16.0	2.1	1.1
Government	27.0	26.6	25.6	23.9	23.3	23.3	23.5	23.3	-2.3	0.0
Federal	1.7	1.4	1.4	1.3	1.3	1.3	1.2	1.2	-0.2	-0.1
State	10.9	10.6	9.5	7.5	7.1	7.0	7.8	7.6	-1.9	0.5
Local	14.4	14.6	14.7	15.1	14.9	15.1	14.5	14.5	-0.2	-0.4
Total Office Related	193.7	192.2	194.0	192.4	194.5	195.7	201.8	204.3	10.3	9.8
Total Nonmanufacturing	119.3	118.8	120.2	119.3	119.8	120.4	122.8	124.1	3.9	4.3

Notes: Figures are in thousands. Numbers may not add to totals due to rounding.

Source: U.S. Department of Labor, Bureau of Labor Statistics – NAICS

Table 3-3
Employment by Industry
Portage Creek Planning Market Area
2000 to 2008

Industry	2000		2008	
	Number	%	Number	%
Total	21,589	100.0%	19,631	100.0%
Agriculture/Mining	216	1.0%	216	1.1%
Construction	928	4.3%	845	4.3%
Manufacturing	3,238	15.0%	2,201	11.2%
Wholesale Trade	497	2.3%	413	2.1%
Retail Trade	2,569	11.9%	2,181	11.1%
Transportation/Utilities	648	3.0%	609	3.1%
Information	583	2.7%	432	2.2%
Finance/Insurance/Real Estate	1,295	6.0%	1,317	6.7%
Services	11,140	51.6%	10,965	55.8%
Public Administration	475	2.2%	452	2.3%

Source: Site To Do Business (www.stdbonline.com) and Axiom.com

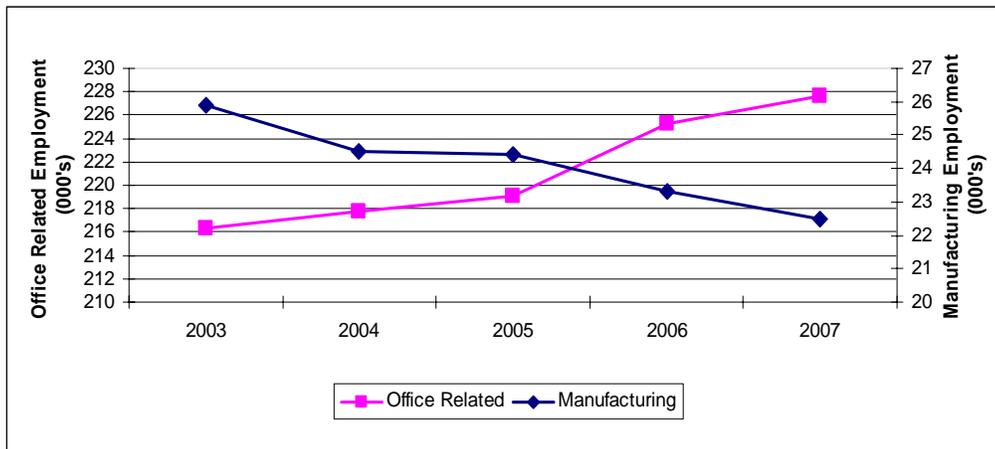
Table 3-2 shows that there was a relatively steady increase in jobs between 1990 and 2000 in the Kalamazoo-Portage HMA. Since 2000, that growth has generally been reversed. There has been a significant loss of goods-producing jobs in the past five years (5,500 jobs were lost between 2002 and 2007). However there has been growth in jobs in the service, trade, construction, health services, professional, and business sectors. For example, about 5,100 jobs have been created in the service sector between 2002 and 2007.

Contained in Table 3-3 is a listing of jobs by industry of workers living in the planning market area. Comparing the Kalamazoo-Portage HMA jobs (Table 3-2) with the jobs held by residents of the planning market area (Table 3-3), reveals approximately 11.2 percent of workers within the planning market area are employed in manufacturing versus 15.5 percent of jobs in the HMA. A growing percentage of workers in the planning market area are employed in the services industry. In 2008, the percentage of workers in the planning market area working in the services industry was 55.8 percent, up from 51.6 percent in 2000. This compares with 53.6 percent of the employees in the HMA employed in professional and business services, education and health services and leisure and hospitality in 2007. The other sectors, such as retail trade, construction, transportation and utilities, and information, show no significant deviation in the planning market area from that of the HMA.

The purpose of this comparison is to measure the differences in the HMA and the planning market area. Despite the differing sources for the data, this comparison shows broad variances in the jobs available in the Kalamazoo HMA versus the jobs held by those living in the planning market area. These broad indicators were used in conjunction with other characteristics to assist in painting a picture of the needs, opportunities, and challenges to be overcome to produce a successful redevelopment.

The data discussed in this section reinforces what is occurring across the country. Manufacturing employment in the Kalamazoo-Portage HMA is steadily declining while service and office-related employment tends to be increasing. This is shown in Figure 3-2 and is very typical of what is observed in many other communities.

Figure 3-2
Employment Sector Trends
Kalamazoo-Portage HMA



3.2 Population and Household Data for the Kalamazoo-Portage HMA

Table 3-4 presents population and household trends. The HMA and Kalamazoo County had a growth in population and households over the 1990s of approximately one percent. This growth continued up to 2008 at a slightly reduced rate for both population and households. During the same periods, the planning market area has shown a continued decline in households and population.

Table 3-4
Population and Household Trends
Kalamazoo-Portage HMA and Portage Creek Market Area
April 1, 1990, to January 1, 2009

Population	April 1, 1990	April 1, 2000	December 2006	Current (2008)	Forecast (2013)	Average Annual Change						Population Density per Square Mile
						1990 to 2000		2000 to Current		Current to Forecast		
						Number	Rate (%)	Number	Rate (%)	Number	Rate (%)	
Kalamazoo-Portage HMA	293,471	314,866	319,738	328,972	336,758	2,150	0.7%	1,763	0.60%	1,557	0.50%	197
Kalamazoo County	223,411	238,603	240,720	247,957	253,144	1,525	0.7%	1,169	0.50%	1,037	0.40%	428
Market Area	41,137	43,719	NA	42,011	41,849	258	0.6%	-214	-0.40%	-32	-0.08%	3,534
Households												
Kalamazoo-Portage HMA	109,104	121,461	125,804	129,827	133,887	1,250	1.1%	1,046	0.80%	812	0.60%	
Kalamazoo County	83,702	93,479	97,303	99,640	102,556	975	1.1%	770	0.80%	583	0.60%	
Market Area	16,572	15,856	NA	15,772	15,837	-716	-0.4%	-11	-0.06%	-13	-0.08%	

Sources: 1990 and 2000 – U.S. Census Bureau; Current and Forecast – Site To Do Business and Integra Realty Resources; and, Population Density – Kalamazoo MLS Website (relohomeseach.com) and U.S. Census Bureau.

3.3 Comparative Demographics

A set of demographic data was compiled and is presented in Appendix B to compare the characteristics of those living in the planning market area with people living in the Kalamazoo Portage HMA and Kalamazoo County. The housing data revealed average home prices in the planning market area increased at the same rate as the HMA and the vacancies show identical trends between 2000 and in 2008. However, average home prices are about 20 percent less in the planning market area than in the HMA.

Table 3-5 presents information about households in the planning market area and region. Assuming that most rental units are multi-family, approximately 29 percent of the housing stock in the HMA is multi-family while about 47 percent of the housing stock in the planning market area is multi-family which is not unusual in more urbanized areas, particularly in a city with a major university. As is typical within the United States, in the past decade, home ownership has generally continued to increase in the region. Home ownership in the Kalamazoo-Portage HMA increased approximately seven percent. However, the planning market area showed a small decline of approximately three percent.

Table 3-5
Population and Household Trends
Kalamazoo-Portage HMA and Portage Creek Study Area
April 1, 1990, to January 1, 2009

	Kalamazoo-Portage HMA			Kalamazoo County			Study Area		
	1990	2000 Current		1990	2000 Current		1990	2000 Current	
Total Housing Inventory	120,485	133,225	141,500	88,955	99,250	106,991	17,733	17,177	17,707
Occupied Units	109,104	121,461	128,000	83,702	93,479	97,303	16,572	15,856	15,773
Owners	73,351	83,724	90,175	53,869	61,458	64,989	8,342	8,270	8,079
%	67.2%	68.9%	70.5%	64.4%	65.7%	66.8%	47.0%	48.1%	45.6%
Renters	35,753	37,737	37,850	29,833	32,021	32,314	8,230	7,586	7,694
%	32.8%	31.1%	29.5%	35.6%	34.3%	33.2%	46.4%	44.2%	43.5%
Vacant Units	11,381	11,764	13,425	5,253	5,771	9,688	1,161	1,321	1,934
For Sale	1,056	1,446	1,475	737	979	NA	151	192	NA
Rate (%)	1.4%	1.7%	1.6%	1.4%	1.6%		0.9%	1.1%	
For Rent	3,003	2,791	3,325	2,580	2,294		571	605	
Rate (%)	7.8%	6.9%	8.1%	8.0%	6.7%		3.2%	3.5%	
Other Vacant	7,322	7,527	8,625	1,936	2,498		439	524	

Note: Numbers may not add to totals due to rounding.

Sources: 1990 and 2000 – U.S. Census Bureau; Current – U.S. Census Bureau, 2006 American Community Survey; and, Study Area – Site To Do Business

The increase in home ownership has been aggressively promoted in the past eight years. As has become dramatically apparent recently with the onset of an economic downturn, this has helped create a major financial crisis which will impact the HMA similar to that observed throughout the country. One effect of the recent economic activity will likely be increased demand for apartment living in the HMA. Comparing the population by age of Kalamazoo County and the planning market area (Table 3-6), using the Kalamazoo-Portage HMA as the base point, reveals some interesting trends. Kalamazoo County has approximately 27 percent of the population in the age range of 0-19 and 23 percent of the population in the age range of 20 to 34. This is less than that found in the planning market area with 30 percent of the population for both the 0-19 age range and in the 20-34 age group. This indicates the planning area is catering to a younger

demographic, which based upon the employment analysis are employed in the information, services, finance, insurance, real estate, transportation, and utilities industries. The planning market area has a lower representation of the 35 to 64 market segment which correlates again with the job statistics. The 65 years and older group, which would be predominantly retired, are nearly equal in their representation in the planning market area and in Kalamazoo County.

**Table 3-6
Population by Age**

Age	2000 Actual					
	HMA		Kalamazoo County		Planning Mkt. Area	
	Number	Percent	Number	Percent	Number	Percent
19 and under	92,070	29.2	68,517	28.7	13,400	30.6
20 to 34	70,351	22.3	57,508	24.1	13,966	31.9
35 to 64	115,924	36.8	85,430	35.8	12,164	27.8
65 and over	36,521	11.6	27,148	11.4	4,190	9.6
Total	314,866	100.0	238,603	100.0	43,720	100.0
2008 Estimated						
19 and under	89,327	27.2	67,105	27.1	12,642	30.1
20 to 34	72,711	22.1	57,781	23.3	12,532	29.8
35 to 64	127,304	38.7	93,681	37.8	12,877	30.7
65 and over	39,630	12.0	29,390	11.9	3,958	9.4
Total	328,972	100.0	247,957	100.0	42,009	100.0
2013 Projected						
19 and under	88,744	26.4	66,486	26.3	12,370	29.6
20 to 34	74,036	22.0	58,792	23.2	12,439	29.7
35 to 64	130,673	38.8	95,904	37.9	12,904	30.8
65 and over	43,304	12.9	31,962	12.6	4,137	9.9
Total	336,757	100.0	253,144	100.0	41,850	100.0

Source: Site To Do Business

A comparative demographic analysis was conducted to assess household income for the planning market area (Table 3-7). The Kalamazoo-Portage HMA was used as a base line. The base line is used to provide a standard for comparing Kalamazoo County and the planning market area through determining the proportional representation of each of the income groups.

**Table 3-7
Annual Household Income**

Income Categories	Kalamazoo County	Planning Market Area
0-\$24,499	23%	31%
\$25,000-\$74,999	49%	49%
\$75,000-\$149,000	23%	17%
>\$150,000	5%	3%

Sources: U.S. Census, 2006 Community Survey, Site To Do Business

The planning market area is comprised of a larger percentage of households in the lower income range of \$24,999 or less. In the middle household income range of \$25,000 to \$74,999, the planning market area and Kalamazoo County are identical at 49 percent of the households. The planning market area has fewer households in the upper income ranges, \$75,000 or more, than the county, 20 percent compared to 28 percent.

3.4 Residential Building Permit Activity

A comparative analysis of the residential building permit activity between 1990 and 2007 is shown in Table 3-8. Kalamazoo County issued approximately 1,200 total building permits between 2000 and 2007. Based on the data presented, 20 percent of the building permits issued were for construction of multi-family housing units. The planning market area statistics were only available between 2003 and 2007 but are sufficient to indicate the planning market area currently has experienced very little additional development either for multi-family or single family housing.

A market study was prepared in 2006 by the U.S. Department of Housing and Urban Development (HUD) which estimated the qualitative demand for new market rate rental housing and for-sale housing in the Kalamazoo-Portage HMA between January 2006 and January 2009. This data is presented in Tables 3-9 and 3-10.

**Table 3-8
Residential Building Permit Activity
Kalamazoo-Portage HMA and Portage Creek Study Area
1990 to December 31, 2007**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Kalamazoo-Portage HMA										
Total	1,005	993	1,126	1,333	1,565	1,741	1,560	1,756	1,583	1,533
Single Family	849	898	994	1,169	1,195	1,221	1,261	1,227	1,326	1,382
Multifamily	156	95	132	169	370	520	299	529	527	151
Kalamazoo County										
Total	728	691	810	987	1,217	1,438	1,227	1,380	1,142	1,069
Single Family	658	637	682	825	875	918	928	853	895	918
Multifamily	70	54	128	162	342	520	299	527	247	151

	2000	2001	2002	2003	2004	2005	2006	2007
Kalamazoo-Portage HMA								
Total	1934	1623	1710	2462	1867	1239	945	606
Single Family	1319	1351	1420	1532	1558	1220	898	563
Multifamily	615	272	290	930	309	19	47	43
Kalamazoo County								
Total	1487	1226	1271	1996	1373	819	697	458
Single Family	907	954	1031	1104	1084	800	652	422
Multifamily	580	272	240	892	289	19	45	36
Study Area								
Total				0	0	1	0	0
Single Family				0	0	1	0	0
Multifamily				0	0	0	0	0

Source: U.S. Census Bureau, Building Permits Survey

Table 3-9
Estimated Qualitative Demand for New Market-rate Rental Housing
Kalamazoo-Portage HMA
January 1, 2006, to January 1, 2009

One Bedroom		Two Bedrooms		Three Bedrooms	
Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand
700	130	830	170	950	75
750	120	880	140	1,000	70
800	110	930	130	1,050	60
850	100	980	110	1,100	55
900	85	1,030	95	1,150	45
950	75	1,080	85	1,200	40
1,000	60	1,130	70	1,250	35
1,100	50	1,230	55	1,350	25
1,200	40	1,330	35	1,450	20
1,300	30	1,430	25	1,550	15
1,400 and higher	25	1,530 and higher	15	1,650 and higher	10

Notes: Distribution above is noncumulative.
 Demand shown at any rent represents demand at that level and higher.
 Distribution excludes demand for dedicated student housing.
 Source: Estimates by analyst for U.S. Department of Housing and Urban Development and HUD’s Analysis of the Kalamazoo-Portage, Michigan Housing Market.

Table 3-10
Estimated Qualitative Demand for New Market-rate Sales Housing
Kalamazoo-Portage HMA
January 1, 2006, to January 1, 2009

Price Range (\$)		Units of Demand
From	To	
100,000	149,999	550
150,000	199,999	725
200,000	249,999	1,250
250,000	299,999	725
300,000	499,999	250
500,000 and higher		100

Note: Data are rounded.
 Source: Estimates by analyst for U.S. Department of Housing and Urban Development (HUD)

In 2006, HUD projected that approximately 1,200 single family units priced between \$100,000 and \$500,000 sale prices and 720 apartment units renting from \$700 per unit for small one-bedroom units to approximately \$1,700 for a large three-bedroom unit would be in demand for the HMA. However, annualizing the projection, the permits in 2006 and 2007 for the Kalamazoo-Portage HMA fell significantly short of the projection with only approximately 700 average single family permits and approximately 45 multi-family permits. Kalamazoo County has been able to maintain its pro rata share of the permits as a result of the precipitous decline from approximately

2,000 building permits in the early portions of that decade to approximately 700 permits in 2006 and 2007. This decline is not unique to Kalamazoo but, nonetheless, is important in making projections into the future concerning the planning market area.

The economic situation of West Michigan is documented and analyzed quarterly by the Upjohn Institute. Excerpts from the June 2008 Business Outlook for West Michigan, W. E. Upjohn Institute for Employment Research, included the following:

- The revised Michigan Department of Labor and Economic Growth (MDLEG) employment estimates for 2007 show that employers in the six metro areas of west Michigan reduced their workforce by 0.4 percent, a loss of 3,100 jobs.
- The revised estimates also captured the collapse of the residential construction sector with the region's firms cutting their workforce by 6.1 percent.
- The education and health services sector grew by 2.4 percent in 2007, but was down from previous MDLEG estimates of a 3.2 percent gain.
- In the West Michigan region, both Kalamazoo-Portage and Niles-Benton Harbor MSAs experienced job gains by area employers adding 1,400 jobs in 2007.

Further observations from the September 2008 Business Outlook for West Michigan, W. E. Upjohn Institute for Employment Research, point to trends in employment and the need for amenities to compete for jobs and, ultimately, investment in housing.

- "Nowadays, amenities get equal billing with tax abatements on machinery in most economic development brochures."
- Total employment in the Kalamazoo-Portage MSA declined by 0.6 percent in the second quarter of 2008 with local economic indicators pointing to worsening conditions over the next few months.

Integra Realty Resources, the market consultant to The Corradino Group for this study, is of the opinion that there is a paradigm shift that is taking place and will be reflected in the future building permit activity in many metropolitan areas of the United States. During the industrial revolution, approximately 25 percent of the rural population created food for approximately 75 percent of the residents who lived in cities. After the industrial revolution, approximately five percent of the population created food for approximately 95 percent of the population living in the urban city areas.

This type of shift will likely reoccur over the next decade as a result of the increased cost of energy, tighter lending criteria for residential housing purchases, and renewed interest of the younger generation in living near the CBD in many cities throughout the country. Both of these relocation attributes are either currently present or emerging at the time of the preparation of this report. The current economic crises – high fuel costs, foreclosures, bank closings, job loss, and the like – may accelerate this shift.

Therefore, while all the data presents a bleak picture in the near term for sparking real estate development in general and in the planning study area in particular, there may be an opportunity possible for development in the planning study area if vacant land can be made attractive and the paradigm shift materializes.

3.5 Market Validation Interviews

The foregoing data represents a possible opportunity for the study area. The remaining question is whether the opportunity is realistic. To assess that, representatives of Corradino conducted a series of one-on-one interviews with public and policy officials and private sector interests, including community leaders, members of the planning commission, developers, and citizens interested in the Portage Creek Reuse Plan. The focus of those interviews was an assessment of the market possibilities for complementary redevelopment of vacant portions of the study area.

A series of common themes emerged from these discussions. Nearly all people interviewed identified not only the immediate study area but the surrounding neighborhoods – Edison, Milwood, Westnedge Hill, and Vine – as being important to this process of complementary redevelopment. There was concern about the image of the area, particularly Portage Street, as being a negative factor that could impact or limit future development opportunities. There was universal recognition among those interviewed that the green space opportunities in the area were positives that could result in attractive amenities to enhance and incent both residential and industrial/commercial redevelopment. It was apparent through the conversations that the possibility of development activities in either the residential or commercial market without significant public push, support and incentive was unlikely.

Neighborhoods

Based on the market study interviews, one of the keys to creating a viable area to attract any type of development is to enhance the appearance of the neighborhoods. This may need to be done incrementally. The first step should focus on strengthening the edges of the neighborhoods. Implementation of specific fundable portions of the Portage Street Streetscape Plan should be considered, recognizing that no funding has been identified for that project. The appearance and theme of Burdick Street north of the study area could be extended south. A street and sidewalk improvement program should be a priority for the study area. Programs for improvements to existing homes and businesses should be aggressively promoted. The immediate study



The Edison neighborhood has a strong neighborhood association but has challenges that will have to be addressed to create an environment for economic development and enhancement.

area could serve as a connector for downtown, Washington Square, Edison, Milwood, and the Bronson medical campus. People working at the medical campus should be considered a target market for residential activity.

Open Space

Portions of the area have obvious potential as open space. The focus should be on connections both to and from the Kalamazoo River and from the Portage Trail (south of Kilgore) to downtown for both pedestrian/bicycle and canoe access. There could be access points in the study area. Many of those interviewed were familiar with the area and adjoining areas from their childhood. The area is one of, if not the, largest undeveloped or underdeveloped areas in the city and is large enough that a number of uses could go there. One person suggested that the study area should be expanded south to Kilgore and have the Milham Park Golf Course rebuilt using part of Blanch Hull Preserve and areas to the north with the existing course turned into a business park. A business park at that location could be very attractive because of access to the interstate.



Millennium Beach in Grand Rapids is a water park, beach, and playground built on former brownfields in Grand Rapids.

Residential Development

New residential development may eventually occur in the immediate study area as housing for people moving closer to the city but not able to afford downtown housing; retirees; people working at Bronson Hospital, and those wanting to locate in Kalamazoo because of the Kalamazoo Promise. Clearly, in light of the current housing crisis across the United States, it could be years before new housing is needed or possible in the area. However, there was sentiment among some of those interviewed that if market rate housing was developed in the neighborhood it would help improve the neighborhood and increase the overall marketability of the area.



New housing on the north side of Kalamazoo that is an example of what could be developed in the Portage Creek area.

Business Attraction

From a development perspective, it was apparent that developers were not likely to invest in the area without significant incentives. There was also a concern that creation of commercial activity in the core of the area would perhaps compete with existing businesses on Portage and Burdick and negatively impact those businesses. Other areas of Kalamazoo have been successfully redeveloped using the brownfield program. This area will be no exception. Possibilities for attracting businesses that support hospital (Bronson), university and research activities (MPI) could be explored.



MacKenzie's is one of a number of successful developments stimulated by the city's brownfields program in the last decade.

Businesses investing and producing green technology would be attractive and could serve as a catalyst to the neighborhood. This area faces major challenges when considering attracting business, particularly industry. The image of the neighborhood is not attractive. Access for trucks and to/from the interstate is not good. There is strong competition not just in the immediate vicinity but in the broader area. There are still ample greenfields within the MSA and even Kalamazoo County with access to interstate. Business and industrial parks (Fort Custer, Davis Creek) both regionally and locally pose competing opportunities. Nevertheless, it should be recognized that this area historically has been a focal point for jobs in the community, and there is community interest in seeing jobs developed in this area.

3.6 Conclusions

The planning market area has a disproportionate group of young people in households of child-bearing years with higher unemployment and declining employment relative to the Kalamazoo-Portage HMA. The planning market area's significantly higher portion of employment in information services and transportation/utilities sectors, but lower employment in manufacturing and service sectors, suggests that the planning market area represents potential growth opportunities in the job market in those latter categories of jobs. (The remaining sectors of employment in the planning market area are proportional to the Kalamazoo-Portage HMA.) Moreover, the greater unemployment and lesser employment levels in general suggest a potential pool of employees if jobs can be attracted to the study area.

The study area as represented by the planning market area is an area or group of neighborhoods in transition. It is an area where the younger generation can invest in a home and expect it to appreciate over the years. This is further exemplified by the income data for the planning market area. Income is typical for a younger, yet less established, household as reflected in the income from \$0 to approximately \$25,000 being 135 percent of the Kalamazoo-Portage HMA.

Conversely, there is a lower representation in income in the \$75,000 to over \$150,000 category which includes well-established households, many of which are dual income households.

In the study area's current condition, forecasts for development of the study area are bleak. This area will not develop unless there is some incentive for its development. The key incentive will include investment in the area to mitigate the contamination to the point that some of the area can be redeveloped. Amenities that make the area more attractive will also be needed to draw development to the study area rather than to other sites in Kalamazoo or neighboring areas.

These factors, coupled with the current economic conditions – high energy costs, the increased restrictions on lending for home ownership, the increased demand in multi-family housing and the propensity of households to locate near jobs – could create a demand for the planning market area, once environmental and physical cleanup is accomplished and the area is promoted by the community. This new entry in the market could be poised to complement CBD housing. The planning market area could attract for-sale and for-rent housing, jobs, and associated services to include retail. Amenities are very important in attracting housing. One key amenity the study area could have is open space. Given the restrictions that will likely be placed on much of the cleaned-up areas, at least some additional open space will be a logical result. Some of the contaminated areas that were once a liability to development could be turned into an incentive through their use as an amenity.

This will be a long-term project and be directly proportional to job growth. Between 1990 and 2000, approximately 22,000 net new jobs were created in the HMA. However, no new net jobs were created in the current decade to date. Given today's economic situation, it is difficult to determine what the future holds for the region's economy. Planning for the area must be based on some historic level of job growth. It would be extremely optimistic to assume that 20,000 jobs would be created in the next decade as were created between 1990 and 2000. Conversely, it would be highly pessimistic to assume no new jobs would be created. Looking at past job growth, a median number of 10,000 jobs is rational as a basis for planning purposes.

If an assumption is made that a level of 10,000 net job growth can be generated by Kalamazoo-Portage HMA over the 2010 to 2019 time frame, this could translate into demand for approximately 630 housing units that could be developed in the HMA. The distribution of these housing units will be about 40 percent rental housing and approximately 60 percent for-sale housing. Assuming an aggressive 25 percent capture of this housing by the planning market area, approximately 170 housing units would be needed, many of which could be developed in the immediate project study area. This historic average estimate of job growth will create demand for housing, retail, industrial, office, and associated infrastructure requiring approximately 30 acres (Table 3-11) in the planning market area, which also could be focused in the immediate study area.

**Table 3-11
Development Land Requirements^a**

Multi-family housing @ 15 units/Ac.	4.50 Acres
Single family housing @ 7.9 units/Ac.	12.90 Acres
Retail \$300/SF Sale ^b	1.41 Acres
Office \$200/SF Job ^c	4.70 Acres
Light industrial	6.49 Acres

^aAssume all retail and jobs remain in re-development area without open areas.

^b\$137,000 HH income

^c1.6 jobs/HH

Source: Integra Realty

This excludes the portion of the study area that will not permit construction either due to physical constraints or environmental issues. This latter will create the parks and open space area which are anticipated to create an attractive park-like setting, enhancing the appeal of the study area.

4. Next Steps

The consultant team will take the information provided in the market analysis, the public input, and input from staff into consideration and develop a draft Portage Creek Corridor Reuse Plan. A public meeting will be held in November to present the draft plan to the public and to discuss the findings of the plan in the context of the previous public meetings (held in June and August) for the study.

Appendix A

Demographic Information

Total Population

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
Population	2,788		77,092		238,603		314,866		9,938,444	

Source: U.S. Census Bureau, Census 2000

Race and Hispanic Origin

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White alone	1,844	66.1	53,502	69.4	199,058	83.4	263,439	83.7	7,805,325	78.5
Black or African American	576	20.7	15,060	19.5	21,548	9.0	25,538	8.1	1,391,487	14.0
American Indian and Alaska Native	30	1.1	443	0.6	1,028	0.4	1,556	0.5	56,373	0.6
Asian alone	56	2.0	1,626	2.1	4,269	1.8	4,467	1.4	173,480	1.7
Native Hawaiian and Other Pacific Islander	0	0.0	187	0.2	211	0.1	228	0.1	2,121	0.0
Some other race	8	0.3	187	0.2	430	0.2	462	0.1	10,605	0.1
Two or more races	169	6.1	2,725	3.5	5,583	2.3	6,938	2.2	176,893	1.8
Hispanic or Latino	105	3.8	3,362	4.4	6,476	2.7	12,238	3.9	322,160	3.2
Total	2,788	100.0	77,092	100.0	238,603	100.0	314,866	100.0	9,938,444	100.0

Source: U.S. Census Bureau, Census 2000

Age

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Under 5	289	10.4	4,734	6.1	15,375	6.4	20,593	6.5	669,662	6.7
5 to 9 years	229	8.2	4,610	6.0	16,204	6.8	22,056	7.0	746,022	7.5
10 to 14 years	187	6.7	4,157	5.4	16,663	7.0	23,180	7.4	747,157	7.5
15 to 19 years	154	5.5	9,270	12.0	19,883	8.3	25,770	8.2	711,934	7.2
20 to 24	169	6.1	14,437	18.7	25,483	10.7	29,352	9.3	647,728	6.5
25 to 34 years	358	12.8	11,364	14.7	32,447	13.6	41,468	13.2	1,356,469	13.6
35 to 44 years	438	15.7	9,088	11.8	35,259	14.8	47,710	15.2	1,612,494	16.2
45 to 49 years	174	6.2	4,214	5.5	17,257	7.2	23,223	7.4	738,388	7.4
50 to 54 years	107	3.8	3,191	4.1	14,158	5.9	19,169	6.1	627,629	6.3
55 to 59 years	89	3.2	2,462	3.2	10,661	4.5	14,651	4.7	484,677	4.9
60 to 64 years	89	3.2	1,833	2.4	8,172	3.4	11,271	3.6	377,052	3.8
65 to 74 years	116	4.2	3,680	4.8	14,136	5.9	19,267	6.1	646,542	6.5
75 to 79 years	71	2.5	1,428	1.9	5,329	2.2	7,138	2.3	259,168	2.6
80 to 84 years	87	3.1	1,203	1.6	3,992	1.7	5,303	1.7	172,625	1.7
85 years and over	231	8.3	1,421	1.8	3,584	1.5	4,715	1.5	140,897	1.4
Total	2,788	100.0	77,092	100.0	238,603	100.0	314,866	100.0	9,938,444	100.0

Source: U.S. Census Bureau, Census 2000

Population by Households by Type

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
In households:	2,575	92.4	67,544	87.6	227,454	95.3	301,794	95.8	9,688,463	97.5
Family households	2,044	73.3	44,838	58.2	179,333	75.2	244,219	77.6	8,221,971	82.7
Nonfamily households	531	19.0	22,706	29.5	48,121	20.2	57,575	18.3	1,466,492	14.8
In group quarters:	213	7.6	9,548	12.4	11,149	4.7	13,072	4.2	249,981	2.5
Institutionalized population	0	0.0	1,254	1.6	2,161	0.9	2,885	0.9	126,879	1.3
Noninstitutionalized population	213	7.6	8,294	10.8	8,988	3.8	10,187	3.2	123,102	1.2
Total	2,788	100.0	77,092	100.0	238,603	100.0	314,866	100.0	9,938,444	100.0

Source: U.S. Census Bureau, Census 2000

Households by Size

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1-person household	372	37.0	10,226	34.8	26,243	28.1	32,563	26.8	992,762	26.2
2-person household	238	23.7	9,583	32.6	32,755	35.0	42,351	34.8	1,243,913	32.8
3-person household	105	10.4	4,258	14.5	14,109	15.1	18,768	15.4	609,201	16.1
4-person household	119	11.8	2,951	10.0	12,399	13.3	16,632	13.7	544,655	14.4
5-person household	73	7.3	1,430	4.9	5,302	5.7	7,291	6.0	254,220	6.7
6-person household	84	8.4	650	2.2	1,942	2.1	2,699	2.2	95,152	2.5
7-or-more-person household	14	1.4	317	1.1	745	0.8	1,229	1.0	48,877	1.3
Total	1,005	100.0	29,415	100.0	93,495	100.0	121,533	100.0	3,788,780	100.0

Source: U.S. Census Bureau, Census 2000

Means of Transportation to Work
(Workers 16 years and over)

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Car, truck, or van:	936	91.3	30,906	85.6	108,725	92.0	141,625	92.6	4,217,141	92.9
Drove alone	750	73.2	26,862	74.4	98,095	83.0	126,824	82.9	3,776,535	83.2
Carpooled	186	18.1	4,044	11.2	10,630	9.0	14,801	9.7	440,606	9.7
Public transportation	42	4.1	1,138	3.2	1,578	1.3	1,634	1.1	60,537	1.3
Motorcycle	0	0.0	9	0.0	42	0.0	56	0.0	1,698	0.0
Bicycle	0	0.0	182	0.5	303	0.3	413	0.3	10,034	0.2
Walked	27	2.6	2,514	7.0	3,460	2.9	4,107	2.7	101,506	2.2
Other means	0	0.0	216	0.6	433	0.4	593	0.4	21,691	0.5
Worked at home	20	2.0	1,157	3.2	3,691	3.1	4,567	3.0	127,765	2.8
Total	1,025	100.0	36,122	100.0	118,232	100.0	152,995	100.0	4,540,372	100.0

Source: U.S. Census Bureau, Census 2000

Travel Time to Work
(Workers 16 years and over)

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than 5 minutes	32	3.1	1,975	5.5	4,477	3.8	6,357	4.2	158,315	3.5
5 to 9 minutes	207	20.2	6,556	18.1	15,258	12.9	19,726	12.9	507,653	11.2
10 to 14 minutes	171	16.7	8,523	23.6	22,814	19.3	27,147	17.7	681,990	15.0
15 to 19 minutes	314	30.6	7,806	21.6	24,242	20.5	28,469	18.6	708,036	15.6
20 to 24 minutes	125	12.2	3,598	10.0	19,513	16.5	24,405	16.0	675,865	14.9
25 to 29 minutes	19	1.9	1,258	3.5	7,014	5.9	9,890	6.5	291,938	6.4
30 to 34 minutes	63	6.1	2,071	5.7	9,726	8.2	14,470	9.5	546,870	12.0
35 to 39 minutes	4	0.4	405	1.1	1,823	1.5	2,983	1.9	126,158	2.8
40 to 44 minutes	31	3.0	518	1.4	1,791	1.5	2,972	1.9	147,930	3.3
45 to 59 minutes	10	1.0	957	2.6	3,455	2.9	5,914	3.9	304,785	6.7
60 to 89 minutes	29	2.8	877	2.4	2,866	2.4	3,906	2.6	171,403	3.8
90 or more minutes	0	0.0	421	1.2	1,562	1.3	2,189	1.4	91,664	2.0
Worked at home	20	2.0	1,157	3.2	3,691	3.1	4,567	3.0	127,765	2.8
Total	1,025	100.0	36,122	100.0	118,232	100.0	152,995	100.0	4,540,372	100.0

Source: U.S. Census Bureau, Census 2000

Educational Attainment
(Population 25 years and over)

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No schooling completed	6	0.3	382	1.0	674	0.5	1,270	0.7	54,757	0.9
Nursery to 4th grade	0	0.0	181	0.5	281	0.2	622	0.3	18,887	0.3
5th and 6th grade	35	2.0	468	1.2	759	0.5	1,498	0.8	48,289	0.8
7th and 8th grade	47	2.7	1,024	2.6	2,593	1.8	4,436	2.3	177,081	2.8
9th grade	32	1.8	785	2.0	2,002	1.4	3,530	1.8	133,539	2.1
10th grade	58	3.3	979	2.5	3,445	2.4	5,398	2.8	214,203	3.3
11th grade	88	5.0	1,393	3.5	3,437	2.4	5,060	2.6	206,512	3.2
12th grade, no diploma	83	4.7	1,106	2.8	3,083	2.1	4,794	2.5	210,865	3.3
High school graduate (includes equivalency)	432	24.5	9,391	23.5	37,615	25.9	55,185	28.5	2,010,861	31.3
Some college, less than 1 year	151	8.6	2,626	6.6	12,162	8.4	16,313	8.4	534,119	8.3
Some college, 1 or more years, no degree	219	12.4	6,106	15.3	22,988	15.9	29,749	15.3	962,457	15.0
Associate degree	123	7.0	2,392	6.0	10,767	7.4	13,868	7.2	448,112	7.0
Bachelor's degree	306	17.4	7,314	18.3	27,586	19.0	32,307	16.7	878,680	13.7
Master's degree	115	6.5	3,891	9.8	12,221	8.4	13,878	7.2	363,931	5.7
Professional school degree	0	0.0	895	2.2	2,774	1.9	3,225	1.7	103,840	1.6
Doctorate degree	65	3.7	951	2.4	2,608	1.8	2,782	1.4	49,808	0.8
Total	1,760	100.0	39,884	100.0	144,995	100.0	193,915	100.0	6,415,941	100.0

Source: U.S. Census Bureau, Census 2000

Employment by Industry
(employed population 16 years and over)

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Agriculture, forestry, fishing and hunting, and mining	60	5.6	245	0.7	1,303	1.1	2,656	1.7	49,496	1.1
Mining	0	0.0	0	0.0	65	0.1	96	0.1	6,163	0.1
Construction	81	7.5	1,506	4.1	6,747	5.6	9,417	6.0	278,079	6.0
Manufacturing	171	15.9	5,788	15.6	24,648	20.4	34,121	21.8	1,045,651	22.5
Wholesale trade	13	1.2	840	2.3	3,740	3.1	4,783	3.1	151,656	3.3
Retail trade	122	11.3	4,416	11.9	14,169	11.7	18,167	11.6	550,918	11.9
Transportation and warehousing, and utilities	80	7.4	1,032	2.8	3,814	3.2	5,763	3.7	191,799	4.1
Information	22	2.0	858	2.3	2,453	2.0	2,835	1.8	98,887	2.1
Finance, insurance, real estate and rental and leasing	25	2.3	2,062	5.6	6,948	5.8	8,586	5.5	246,633	5.3
Professional, scientific, management, administrative, and waste management services	134	12.5	2,756	7.4	8,501	7.0	10,453	6.7	371,119	8.0
Educational, health and social services	247	23.0	10,334	27.8	29,148	24.1	35,727	22.8	921,395	19.9
Arts, entertainment, recreation, accommodation and food services	67	6.2	4,841	13.0	10,446	8.7	12,719	8.1	351,229	7.6
Other services (except public administration)	53	4.9	1,710	4.6	5,667	4.7	7,085	4.5	212,868	4.6
Public administration	0	0.0	753	2.0	3,156	2.6	4,053	2.6	167,731	3.6
Total	1,075	100.0	37,141	100.0	120,740	100.0	156,365	100.0	4,637,461	100.0

Source: U.S. Census Bureau, Census 2000

Employment by Occupation
(employed population 16 years and over)

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Management, professional, and related occupations	202	18.8	11,972	32.2	41,904	34.7	50,953	32.6	1,459,767	31.5
Service occupations	235	21.9	7,775	20.9	18,733	15.5	24,096	15.4	687,336	14.8
Sales and office occupations	262	24.4	9,440	25.4	31,383	26.0	39,097	25.0	1,187,015	25.6
Farming, fishing, and forestry occupations	41	3.8	300	0.8	790	0.7	1,475	0.9	21,120	0.5
Construction, extraction, and maintenance occupations	134	12.5	2,199	5.9	9,357	7.7	13,405	8.6	425,291	9.2
Production, transportation, and material moving occupations	201	18.7	5,455	14.7	18,573	15.4	27,339	17.5	856,932	18.5
Total	1,075	100.0	37,141	100.0	120,740	100.0	156,365	100.0	4,637,461	100.0

Source: U.S. Census Bureau, Census 2000

Household Income

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than \$10,000	117	11.6	4,527	15.4	7,861	8.4	10,264	8.4	313,905	8.3
\$10,000 to \$14,999	95	9.5	2,757	9.4	6,151	6.6	7,923	6.5	219,133	5.8
\$15,000 to \$19,999	90	9.0	2,645	9.0	6,599	7.1	8,766	7.2	227,379	6.0
\$20,000 to \$24,999	60	6.0	2,287	7.8	6,063	6.5	7,964	6.6	241,721	6.4
\$25,000 to \$29,999	65	6.5	1,929	6.6	5,867	6.3	7,887	6.5	236,089	6.2
\$30,000 to \$34,999	51	5.1	1,861	6.3	5,955	6.4	8,023	6.6	234,330	6.2
\$35,000 to \$39,999	79	7.9	1,850	6.3	5,697	6.1	7,598	6.3	219,661	5.8
\$40,000 to \$44,999	91	9.1	1,522	5.2	5,496	5.9	7,184	5.9	214,406	5.7
\$45,000 to \$49,999	32	3.2	1,429	4.9	4,992	5.3	6,432	5.3	190,259	5.0
\$50,000 to \$59,999	92	9.2	2,270	7.7	8,753	9.4	11,498	9.5	353,430	9.3
\$60,000 to \$74,999	111	11.0	2,463	8.4	9,933	10.6	13,257	10.9	425,325	11.2
\$75,000 to \$99,999	62	6.2	1,880	6.4	9,477	10.1	12,235	10.1	432,681	11.4
\$100,000 to \$124,999	46	4.6	874	3.0	4,901	5.2	6,004	4.9	222,789	5.9
\$125,000 to \$149,999	14	1.4	431	1.5	2,255	2.4	2,587	2.1	102,177	2.7
\$150,000 to \$199,999	0	0.0	316	1.1	1,776	1.9	1,986	1.6	79,291	2.1
\$200,000 or more	0	0.0	374	1.3	1,719	1.8	1,925	1.6	76,204	2.0
Total	1,005	100.0	29,415	100.0	93,495	100.0	121,533	100.0	3,788,780	100.0

Source: U.S. Census Bureau, Census 2000

Household Poverty Status

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Households with income in 1999 below poverty level	179	17.8	6,434	21.9	10,799	11.6	13,791	11.3	382,871	10.1
Total Households	1,005	100.0	29,415	100.0	93,495	100.0	121,533	100.0	3,788,780	100.0

Source: U.S. Census Bureau, Census 2000

Housing Units and Tenure

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupied	1,006	91.5	29,411	92.5	93,479	94.2	121,461	91.2	3,785,661	89.4
Owner occupied	559	50.9	14,060	44.2	61,484	61.9	83,737	62.9	2,793,346	66.0
Renter occupied	447	40.7	15,351	48.3	31,995	32.2	37,724	28.3	992,315	23.4
Vacant	93	8.5	2,371	7.5	5,771	5.8	11,764	8.8	448,618	10.6
Total	1,099	100.0	31,782	100.0	99,250	100.0	133,225	100.0	4,234,279	100.0

Source: U.S. Census Bureau, Census 2000

**Vehicles Available
by Occupied Housing Units**

	Study Area		City of Kalamazoo		Kalamazoo County		Kalamazoo-Portage MSA		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No vehicle available	205	20.4	3,690	12.5	6,490	6.9	7,884	6.5	290,240	7.7
1 vehicle available	360	35.8	12,553	42.7	32,526	34.8	40,793	33.6	1,277,655	33.7
2 vehicles available	330	32.8	9,528	32.4	38,029	40.7	49,905	41.1	1,541,576	40.7
3 vehicles available	62	6.2	2,449	8.3	11,841	12.7	16,264	13.4	486,498	12.9
4 vehicles available	31	3.1	757	2.6	3,278	3.5	4,786	3.9	136,894	3.6
5 or more vehicles available	18	1.8	434	1.5	1,315	1.4	1,829	1.5	52,798	1.4
Total	1,006	100.0	29,411	100.0	93,479	100.0	121,461	100.0	3,785,661	100.0

Source: U.S. Census Bureau, Census 2000

Appendix B

Market Study Base Data

**Table 9
Comparative Kalamazoo-Portage HMA, Kalamazoo County and Portage Creek Study Area
Demographics**

Average Household Size	2000	2008	2013
Kalamazoo Portage HMA	5.09	5.01	4.98
Kalamazoo County	2.43	2.39	2.37
Study Area	2.28	2.23	2.21
Owner Occupied Housing Units			
Kalamazoo Portage HMA	83,724	89,327	90,945
Kalamazoo County	61,458	65,258	66,241
Study Area	8,270	8,079	7,922
Renter Occupied Housing Units			
Kalamazoo Portage HMA	37,737	40,500	42,942
Kalamazoo County	32,021	34,382	36,315
Study Area	7,586	7,694	7,915
Total Housing Units			
Kalamazoo Portage HMA	133,225	145,311	151,551
Kalamazoo County	99,250	107,964	112,404
Study Area	17,178	17,707	18,115
Vacant Housing Units			
Kalamazoo Portage HMA	11,764	15,484	17,664
Kalamazoo County	5,771	8,324	9,848
Study Area	1,322	1,934	2,278
Average Home Value			
Kalamazoo Portage HMA	\$117,407	\$136,721	\$143,802
Kalamazoo County	\$127,011	\$148,351	\$156,208
Study Area	\$92,795	\$107,679	\$113,042
Households by Income			
\$0 to \$24,999			
Kalamazoo Portage HMA	34,917	29,691	26,446
Kalamazoo County	26674	22629	20090
Study Area	6003	4920	4351
\$25000 to \$74,999			
Kalamazoo Portage HMA	61879	65299	65248
Kalamazoo County	46693	48701	48725
Study Area	7714	7655	7621
\$75,000 to \$149,999			
Kalamazoo Portage HMA	20826	28795	35665
Kalamazoo County	16633	22928	27898
Study Area	1782	2676	3306
\$150,000 and higher			
Kalamazoo Portage HMA	3911	6042	6528
Kalamazoo County	3495	5382	5843
Study Area	354	521	560
Median Household Income			
Kalamazoo Portage HMA	40775	49661	55831
Kalamazoo County	42178	51660	58262
Study Area	33321	40886	45683
Average Household Income			
Kalamazoo Portage HMA	51160	59836	65365
Kalamazoo County	54416	64773	70873
Study Area	43649	53024	58793
Population by Age			
0 to 19			
Kalamazoo Portage HMA	92070	89327	88744
Kalamazoo County	68517	67105	66486
Study Area	13400	12642	12370
20 to 34			
Kalamazoo Portage HMA	70351	72711	74036
Kalamazoo County	57508	57781	58792
Study Area	13966	12532	12439
35 to 64			
Kalamazoo Portage HMA	115924	127304	130673
Kalamazoo County	85430	93681	95904
Study Area	12164	12877	12904
65 and older			
Kalamazoo Portage HMA	36521	39630	43304
Kalamazoo County	27148	29390	31962
Study Area	4190	3958	4137
Race and Ethnicity			
White Alone			
Kalamazoo Portage HMA	268835	273363	274550
Kalamazoo County	201784	203639	203630
Study Area	33846	30796	29631
Black Alone			
Kalamazoo Portage HMA	27218	30939	33203
Kalamazoo County	23217	26306	28185
Study Area	6048	6630	7027