A VISION FOR PAGE AVENUE

Saint Louis Great Streets Initiative
LEARN · SHARE · PLAN · BUILD
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Completed in June of 2013, the Page Avenue Great Streets Project was funded through the East-West Gateway Council of Government’s (“the Council”) Fiscal Year 2013 Unified Planning Work Program (“UPWP”) by the Missouri Department of Transportation (“MoDOT”). Matching funds were provided to the East-West Gateway Council of Governments by the local project sponsor, Beyond Housing, in collaboration with the City of Pagedale and the Great Rivers Greenway District (“GRG”). In order to complete the planning services for Page Avenue, the East-West Gateway Council of Governments contracted with H3 Studio to lead a team of planning consultants including Development Strategies, Bernardin Lochmueller & Associates, David Mason & Associates, Alta Planning + Design, and Vector Communications Corporation. This document reflects the results of the work completed by the consultant team on behalf of the Pagedale Community.
WHAT IS THE GREAT STREETS INITIATIVE?

The East-West Gateway Council of Governments launched the St. Louis Great Streets Initiative in early 2006 to expand the way communities think of their streets. Rather than viewing a roadway project as solely a way to move more cars and trucks faster, the goal of the St. Louis Great Streets Initiative is to trigger economic and social benefits by centering communities around interesting, lively and attractive streets that serve all modes of transportation. Through the Great Streets Initiative, communities are challenged to envision streets as integrating conduits for moving people, improving connectivity, enhancing the local economy, and creating an attractive place to invest. In brief, building stronger communities!

The Great Streets Initiative assists Communities with harmonizing the design of the street (transportation) and the development of the adjacent land (land uses) through place-making strategies and community engagement. This approach will establish the physical framework of streets and public space around which to build community and ultimately assist in achieving their long-term vision, whatever that may be.
As part of the second round of the Great Streets Initiative in 2012, the East-West Gateway Council of Governments selected Page Avenue in the City of Pagedale as one of three Great Streets Initiative pilot projects in the entirety of the St. Louis Region; thus, congratulations to the Page-dale Community and leadership! The selection of Page Avenue was partly due to the dedication of the Mayor of the City of Pagedale to improve the conditions along Page Avenue with implementation dollars previously provided by the Council; and heavily due to the great efforts and long-term investment of Beyond Housing in the future of the Pagedale Community through programs such as the 24:1 Community Building Initiative and the Pagedale Determined Initiative. Furthermore, Great Rivers Greenway has constructed a majority of the St. Vincent Greenway beyond the City of Pagedale limits, and this length of Page Avenue is a major opportunity to connect the Community to the broader region.

Through the selection of Page Avenue, the East-West Gateway Council of Governments has recognized the importance of the Page Avenue Corridor to the success and well being of the leadership, residents, business owners, and stakeholders of the Pagedale Community.

“We need a plan that will give us more things to do right here in the area that we can walk to and enjoy.”

-Resident, Attendee of Community Meeting
What are the most important features of great streets?

Great Streets can potentially exist anywhere including downtowns, residential neighborhoods, employment centers and so forth. The aspirational principles of Great Streets include:

• **Great Streets are representative of their places.** A Great Street reflects the neighborhood through which it passes and has a scale and design appropriate to the character of the abutting properties and land uses.

• **Great Streets allow people to walk comfortably and safely.** The pedestrian environment on, along and near the street is well-designed and well-furnished. The relationship between the street and its adjacent buildings is organic, conducive to walking, and inviting to people.

• **Great Streets contribute to the economic vitality of the city.** Great Streets facilitate the interaction of people and the promotion of commerce. They serve as destinations, not just transportation channels. They are good commercial addresses and provide location value to businesses that power the local economy.

• **Great Streets are functionally complete.** Great Streets support balanced mobility with appropriate provision for safe and convenient travel by all of the ground transportation modes: transit, walking, bicycling, personal motor vehicles and freight movement.

• **Great Streets provide mobility.** Great Streets strike an appropriate balance among the three elements of modern mobility: through travel, local circulation, and access. The right balance varies with the function of the street and the character of its neighborhoods and abutting properties.

• **Great Streets facilitate place-making.** Great Streets incorporate within them places that are memorable and interesting. These may include plazas, pocket parks, attractive intersections and corners, or simply wide sidewalks fostering an active street life.

• **Great Streets are green.** Great Streets provide an attractive and refreshing environment by working with natural systems. They incorporate environmentally sensitive design standards and green development techniques, including generous provision of street trees and other plantings and application of modern storm water management practices.

• **Great Streets rely on local input.** Great Streets are developed through an open and transparent process with the public where local input is critical to making the project unique to place, informed by local issues, and driven by the Community.

*This information provided by the East West Gateway Council of Governments*
WHAT PART OF PAGE AVENUE ARE WE VISIONING WITH THE COMMUNITY?

The Project Area for the Page Avenue Great Streets Initiative is the roughly 3/4 mile length of Page Avenue from the intersection of Pennsylvania Avenue (on the west) to the intersection of Sutter Avenue (on the east).

As part of this project, a conceptual design (or vision plan) for the right-of-way for this length of Page Avenue was established, as well as future land use recommendations for the parcels (up to a minimum of one parcel) on the 1/2 blocks north and south of Page Avenue between Pennsylvania Avenue (on the west) and Gregan Place (on the east).

Some basic details of the Project Area include the following:

- **Total Land Area**: 40.25 Acres
- **Total Right-Of-Way Area**: 13.78 Acres | 34.2%
- **Total Pavement Area**: 9.25 Acres | 67.5%
- **Total Pedestrian Area**: 4.53 Acres | 32.5%
- **Total Private Property Area**: 23.71 Acres | 58.9%
- **Largest Lot in the Area**: 1.92 Acres
- **Smallest Lot in the Area**: .08 Acres (3,600 SF)

**NOTE**: Further existing conditions information will be provided on the project area in later sections of this report. This section serves purely to document and describe the area for the Great Streets Initiative as being considered and planned.

- 63.8% of those surveyed shop at the businesses in the area.
- 5.3% of those surveyed attend a church in the area.
- 21.8% of those surveyed live on this street.
- 44.1% of those surveyed use this street to get into their neighborhood.
- 11.7% of those surveyed work on this street.

-Community Survey Findings
The Page Avenue Great Streets Initiative consisted of a visioning process, which included numerous outreach and engagement efforts conducted by the consultant team in the hopes to reach as many members of the Community as possible. The purpose of this open and transparent process was for the consultant team to work with the steering committee, residents, business owners, community leaders, and elected officials in order to develop a consensus vision for the Project Area on Page Avenue. Described in further detail herein this section, this process consisted of stakeholder interviews, regular committee meetings, an online survey, a community walk audit, on-site exhibits of the project, and open public meetings. Throughout this visioning process, community members were given the opportunity to provide input through direct conversation, facilitated discussion, and keypad polling exercises. The following pages are a summary of this process and all of the engagement efforts.
SCOPE OF WORK FOR THE PLANNING PROCESS

The planning process for the Page Avenue Great Streets Initiative began in January of 2013, and was concluded at the end of June 2013. The intense six (6) month planning and engagement process involved a vast effort on behalf of many individuals with the East-West Gateway Council of Governments, Beyond Housing, and the consultant team. Furthermore, all of the members of the Project Steering Committee gave an immense amount of personal time in order to assist the team with guidance throughout the planning process, and to this end, the consultant team owes them a great deal of thanks.

In summary, the planning process consisted of five (5) key tasks which were structured around a series of meetings with the Project Steering Committee and the public. The intention of this process structure was to allow for a iterative process, in which multiple entities were participating in the evolution of the plan. In a simple example of this, the consultant team was able to meet with the Project Steering Committee to show the attendees the “plan options” prior to the public meeting, which would allow the consultant team to make informed modifications and updates necessary to ensure that the final “plan options” were moving in the right direction.

Another notable aspect of the planning process for the Page Avenue Great Streets Initiative was driven by the Project Sponsor. At the same time as this planning process was underway, Beyond Housing was conducting two (2) alternate planning processes as part of the “Pagedale Determined” process. These included a Transit-Oriented Development Plan for the Rock Road Metrolink Station and a Healthy Corridor Project for Ferguson Avenue. Within the aggregate of these three processes, there was a great deal of synergy around the St. Vincent Greenway, and thus lots of opportunity for Page Avenue to assume a major role in the future of that project.

“We need an all inclusive plan!”

-Resident, Attendee of Community Meeting
Further building the strength of this reiterative planning process, the consultant conducted an immense amount of outreach for the project, which is described later in this section. Much of this outreach work was founded on the existing social network which was established over the last thirteen years by the Project Sponsor. With that network already in place, the consultant team was able to utilize Beyond Housing’s database of neighborhood residents, local business owners, and municipal leadership to maximize the outreach efforts and increase the transparency and inclusiveness of the planning process.

With this in mind, the East-West Gateway Council of Governments and Beyond Housing charged the consultant team to develop a vision for Page Avenue which would address issues, explore ideas, and achieve goals of the committee, stakeholders, and community members. This vision was to be rooted in the needs and desires of the Pagedale Community, guided by the leadership of the committee and forged in the aspirational principles of the Great Streets Initiative.

Furthermore, this process was structured to provide the community & committee with a series of alternate futures for the Page Avenue corridor, in order to facilitate discussions and assist in decision making. This aspect of the scope of work allowed the consultant team to investigate multiple aspects of the community’s desires simultaneously, while honing in on the appropriate project direction.

In order to address this charge, the consultant team was contracted to complete the five basic tasks of the scope of work. These tasks included (1) the necessary management and administrative tasks, (2) the engagement & collaborative tasks, (3) the assessments & reviews of the existing on-the-ground conditions tasks including traffic, utilities, and character, (4) the analysis of the market & land use tasks, and (5) the project development tasks necessary to complete the work. These five tasks are briefly described here for the purposes of project record:

NOTE: Further information on the schedule of the community engagement & collaboration tasks of work, as well as a detailed summary of discussions and feedback provided by the various participants of those meetings, is described later in this section.

SCOPE OF WORK

TASK 1.0 PROJECT KICK-OFF / MANAGEMENT / ADMINISTRATION

This task entailed all of the daily management and administrative tasks necessary to complete the project including: Kick-Off Meeting; Baseline Data & Background Information; Creation of Project Basemaps; Review of all of the work-to-date; Council Review Work-Sessions; and routine Project Administrative tasks.

TASK 2.0 COMMUNITY ENGAGEMENT & COLLABORATION

This task entailed all of the community events and coordination between the project team and the various constituents of the planning process, including: Project Steering Committee Meetings; the Online Survey; Stakeholder Interviews; the Community Walk & Mobility Audit; the Community Design Charrettes; the On-Site Exhibits; Ongoing Stakeholder Engagement; and Capacity Building.

TASK 3.0 EXAMINATION / ANALYSIS OF EXISTING CONDITIONS

This task entailed all of the reviews and assessments of the built environment and traffic conditions of Page Avenue, including: On-Site Right-of-Way Survey; Context Analysis; History & Community Character; Utilities & Infrastructure; Roadway & Traffic Capacity Analysis; and the Urban Design Analysis.

TASK 4.0 MARKET / LAND USE ANALYSIS

This task entailed all of the real estate and market studies for the project area and the surrounding community including: a Corridor Real Estate Market Study; a Corridor Market Strategy; Corridor Development Feasibility Analysis; and an Enhancement Strategy for the broader neighborhood.

TASK 5.0 DETAILED PLAN

This task entailed all of the project development tasks, including: Community Vision & Project Goals; Plan Options; the Preferred Plan; the Detailed Street Plan; Implementation Phasing & Strategy; Opinion of Probable Costs; and the Draft and Final Plan Documents.
SCHEDULE OF EVENTS FOR THE PLANNING PROCESS

As critical to the planning process, the community engagement & collaboration tasks formed the backbone of the project schedule. The following schedule of events applied to these tasks:

- **Project Kick-Off Meeting**
  Tuesday, Jan 22, 2013 (10:30 AM)

- **Initial Stakeholder Interviews**
  Thursday, Feb 21, 2013 – Monday, Feb 25, 2013

- **Project Steering Committee Meeting #1**
  Tuesday, Feb 27, 2013 (5:30 PM)

- **Launch Online Survey**
  Launched Wednesday, Mar 6, 2013

- **Community Walk & Mobility Audit**
  Saturday, Mar 2, 2013 (9:00 am)

- **Project Steering Committee Meeting #2**
  Tuesday, Mar 26, 2013 (5:30 pm)

- **Great Streets Community Design Charrette**
  Tuesday, Apr 9, 2013 (5:30 pm)

- **On-Site Exhibit of Project Materials & Surveys**
  Saturday, Apr 13, 2013 (11:00 am)

- **On-Site Exhibit of Project Materials & Surveys**
  Saturday, Apr 27, 2013 (11:00 am)

- **Close Online Survey**
  Monday, Apr 29, 2013

- **Follow-Up Stakeholder Interviews**
  Monday, Apr 29, 2013 - Thursday, May 2, 2013

- **Project Steering Committee Meeting #3**
  Tuesday, Apr 30, 2013 (5:30 pm)

- **Great Streets Community Design Charrette**
  Thursday, May 8, 2013 (5:30 pm)

- **Capacity Building Workshop**
  Thursday, Jun 13, 2013 (9:00 am)

- **Final Report**
  Friday, June 28, 2013

98% of the attendees said that they enjoyed the public meetings as part of this planning process.

- Keypad Polling Results
OVERVIEW OF THE COMMUNITY ENGAGEMENT PROCESS

Between January and May of 2013, the Page Avenue Great Streets project team implemented a public engagement program designed to elicit meaningful stakeholder and community involvement in the Great Streets planning process. Team members used a variety of outreach, communications and engagement tactics to facilitate constructive exchanges of information and ideas between the public and the project’s decision makers. Community residents and stakeholders were given multiple opportunities to provide their input into the planning process and to share their project interests, concerns, and aspirations. A summary of the engagement program’s objectives, activities, and outcomes is presented here:

Adherence to Title VI of the Civil Rights Act of 1964

In accordance with the East-West Gateway Council of Government’s public engagement policies, the Great Streets team complied with all federal and state laws, regulations, orders, and directives regarding non-discrimination in federally assisted programs. Public outreach, marketing, and involvement efforts, including the development of promotional materials and the hosting of public events, were conducted in accordance with Title VI of the Civil Rights Act of 1964. The project team worked closely with East-West Gateway throughout the planning process to make sure that environmental justice requirements concerning minority and low-income persons were adequately and appropriately addressed.

Among the specific actions that were to ensure Title VI compliance were statements on all public meeting notices regarding the Act and the availability of special accommodations for the public if needed. Also, as part of the outreach process, the team reviewed demographic data from the 2010 U.S. Census to identify minority populations that may have needed special targeting. Though they did not find any that met the 5% population threshold in Pagedale’s mostly African American community, they mailed public meeting notices to all who lived or operated a business within a half-mile of the design corridor. In this way, they worked to ensure that everyone had access to project information and involvement opportunities. They also placed door hanger announcements of the public meetings at each residence and business within a quarter-mile of the design corridor. Lastly, Title VI brochures explaining citizens’ rights and protections were distributed to all attendees of the public meetings.
Goals & Objectives of the Engagement Process

The central aim of the public engagement program was to obtain meaningful participation in the planning process by Pagedale stakeholders and constituents. Accomplishing this required that stakeholders and the public have an appreciation of planning parameters as well as an understanding of major project decisions and their implications. More specifically, meaningful participation was most likely to occur when the involvement program increased project awareness among stakeholders and the public; stimulated people’s interest in plan activities and findings; deepened comprehension of the plan and its eventual outcomes; and solicited constructive public input. These objectives are described in greater detail on the following pages.

Raising Awareness

Expanding the community’s awareness of Pagedale’s improvement efforts required the project team to provide clear, accurate, and easily attainable information on the plan’s purpose, activities, and desired outcomes. To achieve this, the project team: 1) worked closely with Beyond Housing and East-West Gateway to deliver reliable, timely project information to the public and area stakeholders; 2) held regular planning and coordination meetings, ensuring the accuracy of information communiqués; and 3) partnered with area businesses and institutions to disseminate project information and maximize the project’s community exposure.

Generating Interest

While public information and awareness activities broadened the community’s knowledge of the project, they did not, by themselves, guarantee the public’s interest in the planning process. Getting people to care about the project meant first helping them to understand how it would impact their quality of life. By focusing on the outcomes that mattered most to people like economic growth, improved street and sidewalk conditions, new retail and housing, better transit access, community beautification, and more green space, the team shaped a project identity that helped to firmly establish the project’s relevance.

When asked “Which of the following best describes you?” community survey respondents said...

- 71.1% said they live very close to Page Avenue
- 18.1% said they were just passing through Page Avenue
- 9.0% said they work on Page Avenue
- 5.4% said they own a business on Page Avenue
- 4.8% said they do not live near Page Avenue
**Promoting Understanding**

Once Pagedale constituents were interested in the project, the team intensified its explanation of project issues as well as deepened its understanding of stakeholders’ values, needs and priorities. Through stakeholder and committee meetings and community charrettes, the team facilitated learning and sharing around key plan components, including assessments of the public realm; traffic and parking conditions and capacity; utility conditions and feasibility; land use; pedestrian circulation / community mobility; and bus and bike routes.

**Soliciting Input**

The project team’s work to educate the community about the Great Streets planning initiative prepared the public to give meaningful input into the planning process. Informed stakeholders, including civic and business interests, elected officials, educational and faith based leaders, and neighborhood residents, provided project feedback that was helpful and insightful. Through stakeholder and committee meetings, community charrettes, an online and paper survey, public comment forms, email messaging, and other touch points, the team received valuable information from the community.

When asked
“How would you describe your race?”

Community survey respondents said...

- 86.0% said they were Black | African American
- 6.7% said they were White
- 2.8% said they were American Indian or Alaskan Native
- 0.6% said they were Asian
- 3.9% declined to answer
SUMMARY OF THE ENGAGEMENT APPROACH & PROCESS

To advance its public engagement goals and objectives, the project team developed a four-part engagement approach that consisted of stakeholder involvement, public involvement, technical review and capacity building, and community outreach. Though distinct in terms of their target audience or means of connection, these engagement focus areas were not only interrelated, they were also simultaneously executed to promote a high level of community awareness and participation. For each, a series of activities was undertaken to facilitate the success of the public engagement program. These activities, and the engagement focus areas they support, are shown above.

Viewed in its totality, the public engagement program was designed to provide community stakeholders and residents with multiple points of entry into the planning process. In this way, the project team was able to assure accessibility, which helped to maintain open lines of communication with the public and maximize project participation.

COMMUNITY ENGAGEMENT FINDINGS: A PLAN TO GET STARTED

Before conducting any outreach, engagement, or communications activities, the project team developed a Public Engagement Plan (which is included as the appendices of this report) that explained the logic and methods of the community engagement program. This document presented the range of activities the project team planned to undertake to engage stakeholders and affected publics in the design process and decision-making.

This plan also outlined the goals and objectives of the involvement process; identified key stakeholder groups; and clarified the specific communication strategies, meeting schedules, and expected outcomes of the engagement process. In February (of 2013), East-West Gateway and Beyond Housing approved the plan, and the project team began to execute its core components in alignment with the broader design process. Shown on the following pages, the Stakeholder and Public Involvement Plan included stakeholder involvement activities, public involvement activities, technical review & capacity building activities, and community outreach activities:
STAKEHOLDER INVOLVEMENT ACTIVITIES

Stakeholder Interviews & Follow-Up Interviews
Beyond Housing developed a list of stakeholders for the project team to interview in individual and small group settings. The first round of these confidential meetings was held from February 21, 2013, to February 24, 2013. During this time frame, the team conducted 11 interviews with 21 individuals, including local business owners, property owners, residents, elected officials, and non-profit leaders. These one-hour interviews gave team members the opportunity to learn about important community issues and to gather ideas that would assist in plan development. The second round of stakeholder follow-up interviews was held from April 29, 2013, to May 2, 2013. As with the first round, these meetings were confidential and helped the project team to focus on the most critical issues and ideas for the community. Members of the Project Steering Committee took the insights that emerged from these meetings and prioritized them, which helped the project team to assess its planned improvements. The tables below provide a brief review of stakeholders’ and Committee members’ top priorities. A summary list of consensus issues and ideas is shown in the appendix of this report.

Project Steering Committee Meetings
In addition to conducting stakeholder interviews, the project team facilitated three (3) Project Steering Committee meetings. Beyond Housing established the 16-person Committee so that team members could engage community stakeholders throughout the planning process. The team held 90-minute planning and update sessions with Committee members between February and May of 2013. Because of the depth and breadth of the content covered during these meetings, no synopsis has been provided in this document. A full summary of each meeting is, however, presented in the appendix of this report.

When asked “In what age range do you belong” community survey respondents said...

- 5.9% said they were 21 and under
- 18.9% said they were 22 to 34
- 17.3% said they were 35 to 44
- 17.8% said they were 45 to 54
- 18.4% said they were 55 to 64
- 20.5% said they were 65 and over
- 1.1% declined to answer
**PUBLIC INVOLVEMENT ACTIVITIES**

**Online & Paper Survey**
Between March and May of 2013, the project team administered 198 community surveys electronically and in person. The purpose of the survey was to obtain community input on Page Avenue's strengths, challenges, and needed improvements within the project's target area. The survey, which used mostly Likert-scaled and multiple-choice questions, also gave respondents an opportunity to share their redevelopment aspirations for the community at-large, including their desires for expanded retail and housing options, greater access to transit, and street and sidewalk improvements. To maximize participation, the survey was advertised through door hangers, direct mail, the project's web page, and general word-of-mouth. A full report of the survey's findings are included as an appendix in this report.

**Community Design Charrettes**
Two times during the planning process, the project team presented its work to the Pagedale Community and public-at-large via interactive workshops or community design charrettes. These workshops consisted of a public presentation followed by facilitated small group discussions that elicited community feedback, helped build consensus, and advanced the corridor’s design. Following each charrette, the project team summarized the public’s comments in reports that were shared with the project sponsor and Steering Committee. These reports are included as appendices to this report.

**Community Walk & Mobility Audit**
On March 2, 2013, the project team performed a community walk and mobility audit that involved nearly 20 area stakeholders and residents in identifying mobility challenges and opportunities along Page Avenue. In general, the audit involved an introduction to the Great Streets concept, a walk along Page Avenue, and a debrief session following the walk. At the conclusion of the Community Walk, participants reconvened at Beyond Housing’s offices to discuss their findings and concerns regarding the existing conditions of the corridor. They also suggested improvements that would enhance the walking and biking experience along Page Avenue. Findings from this activity assisted team members, decision makers, and stakeholders in determining ways to improve walking and bicycling conditions along Page. The project team compiled the audit results into a summary document which is included in the appendix of this report.

**On-Site Exhibits of Project Materials & Surveys**
On the Saturdays following the first community charrette, the project team displayed boards and information from the events at the Save-A-Lot. These staffed exhibits helped to generate public interest in the planning process and provided opportunities for soliciting additional feedback. While on site, team members discussed the project with community members, conducted in-person surveys, and responded to public comments and questions. An additional on-site exhibit to update community members will be conducted in July when the project is completed.
TECHNICAL REVIEW
& CAPACITY BUILDING ACTIVITIES

To help ensure a smooth transition from Great Streets planning to project implementation, the Page Avenue team engaged municipal officials, utility representatives, and state agency staff in its planning efforts both early in the process and at critical decision-making points. Meetings with the City of Pagedale, the Missouri Department of Transportation (MoDOT), and others were conducted along with the team’s various stakeholder involvement activities. Additionally, the team scheduled a capacity building workshop at the project’s end for representatives of the above-mentioned organizations as well as other stakeholders charged with plan implementation.

Technical Review Meetings
Throughout the planning process, the project team coordinated technical reviews of its corridor findings with key stakeholders, including the City of Pagedale, MoDOT, the Metropolitan St. Louis Sewer District (MSD), and Metro. Since Page Avenue is a MoDOT Supplemental Route (Missouri Route D), team members worked to ensure that all traffic analyses and proposed plans conformed to MoDOT processes and were approved by the agency. Additionally, the project team engaged the City of Pagedale, MSD, and Metro to confirm key technical constraints as well as identify specific planning opportunities.

Capacity Building Workshop
In June, at the end of the planning process, the project team met with the plan’s sponsors – Beyond Housing and East-West Gateway – as well as other critical stakeholders to transition to Great Streets’ implementation phase. During this meeting, team members: 1) reviewed potential phasing, funding and bundling of the identified work; 2) disclosed cost estimates; and 3) discussed the critical linkages between work segments and project phasing. A key outcome from this meeting was the agreement between parties regarding the geographic location and scope of work for the Page Avenue Streetscape Phase II Improvements slated within the St. Louis Transportation Improvement Program for fiscal years 2014 through 2017. This coordination was important to ensure the strategic allocation of funds.

When asked “Which of the following describes your household income?”

...community survey respondents said...

- 35.7% said 0$ to $24,999
- 27.5% said $25,000 to $49,000
- 12.6% said $50,000 to $74,000
- 4.4% said $75,000 to $99,000
- 3.8% said $100,000 or more
- 15.9% declined to answer
COMMUNITY OUTREACH ACTIVITIES

The project team’s community outreach activities were largely undertaken to drive stakeholder and public participation in the April and May community charrettes. Working together, team members and Beyond Housing staff conducted a variety of communications and outreach tactics preceding both public meetings. A comprehensive summary of the results of these activities can be found in the Public Engagement Summary Report, which is included in the appendices of this report.

These activities included direct mailers, door hangers, targeted canvassing, telephone outreach, posters and flyers, web-based outreach, and e-blasts. A brief summary of outreach efforts is provided in the table on this page.

In addition to these activities, the project sponsor (Beyond Housing) also send out emails to over 1500 individuals on the 24:1 and Pagedale Determined call lists; as well as, constructed a road sign along Page Avenue to draw attention to the project and planning process.

CONCLUSIONS REGARDING THE COMMUNITY OUTREACH EFFORTS

In the six-month Great Streets planning period, the Page Avenue project team designed and executed a robust public engagement program that generated meaningful stakeholder and community involvement in the planning process. With assistance from Beyond Housing’s staff members and supportive community stakeholders, team members involved hundreds of people in planning the future of Pagedale. Taken together, participants’ collective efforts have greatly contributed to the emergence of a stronger, more vibrant community.
Place-making is a very important aspect of the Great Streets Initiative. Rather than purely focusing on the importance of vehicular transportation along Page Avenue, the Great Streets Initiative seeks to use the multi-modal transportation network as a framework for community development and neighborhood revitalization by establishing places which are memorable, exciting, and functional. In many respects, the Great Streets Initiative is really about creating “great places”. Fundamental to the success of the Great Streets Initiative is the ability of our team to understand the morphology, evolution, and social formation of the City of Pagedale, as well as to identify and leverage existing on-going planning and improvements within the Community today. The purpose of this section of the document is to catalog a brief history of the City of Pagedale and the context for Page Avenue, while also providing a brief summary of all of the applicable on-going planning documents and projects.
A BRIEF HISTORY OF THE CITY OF PAGEDALE & PAGE AVENUE

The City of Pagedale and many of the neighborhoods and subdivisions along Page Avenue today evolved from rural farmlands located on the outskirts of the City of St. Louis. In the early 1800s, much of this area consisted primarily of large lots under single ownership. These lots were used for apple, peach, and pear orchards, as well as a number of upland and riparian areas utilized for duck and game hunting, which is still exhibited in many of the streets’ names such as Mallard Drive and Ruddy Lane.

The primary landowners in the area were Andrew Roberston Jr. (who controlled almost all of the land between Page Avenue and Saint Charles Rock Road), George Kingsland, and the Watson Family. And while many maps indicate that there was a major street aligning with what is Page Avenue today, there were few public roads in the area and most of these streets were not yet paved, which would make them impassable during spring thaws. Sidewalks were typically constructed with heavy wood planks along the edge of the road, and large rock slabs were used at crossings. Thus, early infrastructure and pedestrian connectivity was limited to a few key streets through the area, as shown in the 1868 Pitzman Map on the opposite page.

Almost 60% of attendees believe that it should be a high priority to “establish a place which will increase property values and foster home ownership.”

-Keypad Polling Results
The area was first really subdivided in the mid 1800s, where around that same time, Page Avenue was extended from the City of St. Louis into what is now the City of Pagedale. In the late 1870s, the right-of-way for Page Avenue was clearly identified through George Kingsland’s property headed northwest to North Hanley Road as shown on the 1878 Pitzman Atlas.

By the late 1890s, Page Avenue and much of the street structure to the south was in place as shown on the 1893 Atlas of St. Louis County. However, the areas to the north of Page Avenue were fairly disconnected due to the fact that many of the streets still did not exist (except for Kingsland Avenue). Following this in 1903, the Terminal Rail Road was constructed through the Chapman Farm just north of Page Avenue, further disconnecting the street from many residents to the north.

Though the new infrastructure was somewhat limiting for development, many of the first homes in the area were built using lumber from the 1904 St. Louis World’s Fair. These early-century dwellings sold for six hundred to two thousand dollars, and many of the lots for these homes were sold for five dollars per square foot.
At the time, there was no indoor plumbing, no sanitary sewers, and few homes had centralized heating systems. However, new schools such as the Hazel Hill School, and the close proximity to the Dinky Electric Streetcar Line, provided plenty of reasons for the continued settlement of the area.

One of the first early dwellings in the area was the Nicholas Craig Homestead, which was located at the southeast corner of Kingsland Avenue and Whitney Avenue. Craig had fled from slavery in Kentucky as a boy before finding his way to Hannibal, where he was, by chance, reunited with his mother who was also sold into slavery. Though the Craig home is not standing today, Whitney Avenue remained a prominent street for African American ownership and professionalism for many decades.

Page Avenue’s main role was to provide for east-west connectivity from the City, while the major mode of transportation remained the Dinky Electric Streetcar Line. This streetcar went from Hodiamont Avenue to the Creve Coeur Line south of Olive Boulevard, and then onto Ferguson Avenue to the St. Charles Line at Rock Road. When the line was discontinued in the 1930’s, Page Avenue was widened all the way to Pennsylvania Avenue.
After the incorporation of the City of Pagedale on February 15, 1950, the population began to grow, due heavily to an influx of blue collar workers following the manufacturing boom in the suburbs. With a population of approximately 5,000 residents and 200 businesses, most of the residents of the City were employed at the Wagner Electric Plant, the Lever Brothers Company, the Hill Behan Lumber Company, or the Stix, Baer and Fuller Warehouse. The first City Hall was established at 1250 Ferguson Avenue, and the City was open for business.

Local entrepreneurship was a major part of the growth in the City of Pagedale, and though primarily associated with St. Charles Rock Road to the north, the area hosted some of the best local retailers at the time including: the Jones Ice Cream Shop, the Ontario Store, Priege's Bakery, the Lewis Confectionery, the McKinney's Store, and a Premster Grocery with a U.S. Post Office.

With the population growth and influx of workers and their families to the area came the necessity for public spaces and more family-oriented recreational activities. In 1955, the City of Pagedale acquired two tracts of land and posted a bond for $75,000 dollars for the completion of Baerveldt Park, the City's first municipal park. At the same time, Kiddie Land was becoming one of the most popular outdoor parks in Missouri, as noted in a 1958 copy of Billboard Magazine. Kiddie Land offered eleven types of children’s rides, pony rides, three refreshment stands, and free admission and parking.

Throughout the 1960's and 1970's, many of the local businesses began to decline. Well-known local establishments such as the Olympic Drive-In began featuring X-rated movies, along with other establishments which were offering then-illegal gambling and adult entertainment. As the area began to decline and property values dropped, there was a rapid influx of small used car lots and vehicle repair shops along both Page Avenue and St. Charles Rock Road.
At the same time as this economic decline, and very similar to many other North St. Louis County suburbs, the demographics and social conditions of the City of Pagedale began to evolve. In the early 1980s, the Wagner Electric Plant closed its doors to move to Florence, Kentucky, severely impacting the economy due to the layoff of hundreds of workers. The area experienced a large amount of vacancy and foreclosures due to the decline, and many older white members of the population began moving to the west, out of the City of Pagedale, in search of new housing and jobs.

At that time, Whitney Avenue was really the only street available for African Americans to live on in the City of Pagedale, and efforts such as gating off streets had previously been taken to stop the residents of Whitney from accessing Page Avenue, as shown above. Thus, with the new abundance of housing stock available, more African Americans began moving to the City of Pagedale, and the City began to evolve into the Community that it is today.

NOTE: This section was created using the following references: Black America Series: St. Louis Disappearing Black Communities; Discovering African American St. Louis: A Guide to Historic Sites; historic information provided by Beyond Housing (A History of the City of Pagedale, Missouri; Pagedale Area History 1887 - 1910); and independent research at the Missouri Historical Society in the City of St. Louis.
A RECENT HISTORY OF THE
CITY OF PAGEDALE & PAGE AVENUE

With the challenges of this new economy and changing landscape of the job market, the newly elected Mayor, the Honorable Mary Louise Carter, was elected in 1994 and was alarmed by a large number of home mortgage foreclosures in the area, noting specifically that many of the owners were “uncaring, out-of-state buyers”. Then faced with on-going maintenance costs and declining property values, the City approached the County and was awarded the right to one hundred vacant lots in the City of Pagedale. With this new redevelopment opportunity, a partnership was forged between the City of Pagedale and Beyond Housing, a regional non-profit community development and housing organization which had been working in the area for thirty-five years. Since this alliance began, over one hundred new homes have been constructed, and over two hundred owner-occupied homes have been rehabbed in the area.

In the 2000 Census, the population of the City of Pagedale was estimated at 3,616 residents, having declined as much as thirty percent since the sixties. In 2002, the City built a new City Hall along Ferguson Avenue and also formed the Pagedale Community Association, which provides leadership training through the Neighbor-
works American Training Institutes. Along with these accomplishments, Beyond Housing’s Family Support Center began to provide after-school programs and job training opportunities for neighborhood residents, focusing on the social foundation of the community.

Since 2000, Beyond Housing had been working with the City of Pagedale to improve quality of life for the residents. In 2009, they initiated a “place-based” model for community transformation and progress, known as the 24:1 Initiative. The strategy was to work in multiple dimensions (such as family support services, housing improvement, leadership development, business development, youth development, asset building, and neighborhood revitalization) in order to address the disinvestment that had taken place over the last thirty years in the community. From 2004 to 2009, the crime rate in the City of Pagedale decreased by about 27%, while crime in St. Louis County was still rising.

By 2010, Beyond Housing had facilitated more than $26 million in community reinvestment activity in the area. From a Tax Increment Financing Redevelopment Plan approved in 2007, the Save-a-Lot Grocery Store was completed as the first portion of a larger vision for the Page Avenue Corridor. At that time, the City of Pagedale was effectively considered a “food desert”, not having access to a grocery store since the 1960s. This new $5 million investment by Beyond Housing quickly became the central focal point of all future development and social rebuilding.

Following the success of the Save-a-Lot, the Rosie Shields Manor Senior Living Facility was completed on the southwest corner of Ferguson Avenue and Page Avenue, adding forty-two units designed specifically for the elderly and disabled. The project would also include the Midwest BankCentre, which would be the first-ever full service banking facility in the City of Pagedale. With these new projects in place, much of the physical framework for community reinvestment was established. Today, the City of Pagedale and Beyond Housing continue to work closely with the community, much of which is described in the following section of this report.

NOTE: This section was created using the following references: “Getting a Grocery Store in Your Community” from www.stablecommunities.org; the 24:1 Community Plan; and 24:1 Initiative Impact Reports.
PREVIOUS PLANNING STUDIES AND APPLICABLE PROJECTS

As a critical part of any planning project, and especially critical to the Great Streets Initiative for Page Avenue, it was important that the consultant team build upon all of the work which had been completed in the community to-date. As previously described, much of this work directly involves the efforts between the City of Pagedale and Beyond Housing over the last six years.

Many of these key projects (which are listed on this page for reference) were aimed at identifying market redevelopment opportunities, strategies for social empowerment, community outreach and transparency approaches, and physical infrastructure planning projects. Primarily applicable to the Great Streets Initiative for Page Avenue, the redevelopment projects and infrastructure planning would have the most impact on decision-making and project direction.

In general, the 24:1 Initiative by Beyond Housing has become a critical component in the revitalization of the area. This on-going engagement work has become the gateway between the community, providing key insights into the needs, concerns, and aspirations of the Pagedale Community. More specifically, as a subset of the 24:1 Initiative, the Pagedale Determined effort is a collection of three (3) physical development projects, which, when completed, will transform entire sections of the City of Pagedale. This Great Streets Initiative is one of those three projects and is critical to the establishment of a town center for the Pagedale Community.

These infrastructure projects are the result of an immense amount of collaboration and funding by the East-West Gateway Council of Governments, the Missouri Foundation for Health, the Des Lee Collaborative Vision, the Great Rivers Greenway District, the Missouri Department of Transportation, Trailnet, METRO, and Citizen’s for Modern Transit.

More specific details regarding the most applicable studies and projects are described in greater detail in the following section of this report.

LIST OF STUDIES & PROJECTS

24:1 INITIATIVE PLAN
- Final 24:1 Community Plan
- 24:1 Initiative Plan Impact Report 2011
- 24:1 Initiative Plan Impact Report 2012

PAGEDALE HEALTHY CORRIDOR PROJECT
- Healthy Corridor Grant Proposal

PAGEDALE TIF HEALTH IMPACT ASSESSMENT
- Page Avenue HIA Report
- Page Avenue HIA Impact Table

PAGEDALE TOWN CENTER MARKET INFORMATION
- Market Radius Analysis Data
- Market Radius Analysis Household Spending
- Retail Market Area Census Data
- Retail Market Area Overlay Boundary
- Retail Market Area Profile

PAGEDALE TOWN CENTER TAX INCREMENT FINANCING (TIF) PLAN
- Development Feasibility Report
- Redevelopment Project Area
- Redevelopment Plan & Blighting Study
- Original Redevelopment Site Plan

ST. CHARLES ROCK ROAD TOD
- Feasibility Study for Rock Road Station

ST. VINCENT GREENWAY PROJECT
- Conceptual Layouts & Plans

PAGE AVENUE STREETSCAPE PHASE II IMPROVEMENTS
- The East-West Gateway Transportation Improvement Program 2014-2017

PAGEDALE SENIOR HOUSING
- Site & Market Study
TAX INCREMENT FINANCING (TIF) REDEVELOPMENT PLAN

This plan provides for the redevelopment of an area consisting of 41 parcels of land in the City of Pagedale, Missouri, primarily located in an area bounded by Belrue Street, Kingsland Avenue, Schofield Avenue, Buckner Place, Page Avenue, and Ferguson Avenue. The plan is a culmination of a deliberate and strategic effort undertaken through a partnership of the City of Pagedale and Beyond Housing.

The process included a Comprehensive Community Development Initiative, a Feasibility Report, the incorporation of relevant and recognized planning studies and existing area plans, as well as extended discussions with Stakeholders and City officials. Utilization of tax increment financing (TIF) to assist with the construction of the proposed projects and related public improvements will enable the Redevelopment Area to be put to its highest and best use. Redevelopment Projects A (Save-a-Lot) & B (Rosie Shields) of the TIF Plan have both been completed as of 2013. The total redevelopment costs for the TIF Plan are estimated to be approximately $42.2M, including some improvements to Page Avenue throughout the TIF area.

PAGE AVENUE STREETScape PHASE II IMPROVEMENTS

Through a grant from the East-West Gateway Council of Governments, the City of Pagedale received funding for the second round of improvements to Page Avenue. The first round of improvements (show above for reference) was completed by the City of Pagedale a couple of years ago, and it included new sidewalks, new street lighting, and some new landscaping along Page Avenue from Quendo Avenue to Pennsylvania Avenue. These improvements were well received.

The second phase of these improvements has been slated within the St. Louis Transportation Improvement Program for fiscal years 2014 through 2017. The funding is available for Sustainable Development improvements essentially to be executed from Pennsylvania Avenue east to the City Limits and include a continuation of the sidewalk improvements, street lighting, and landscaping along Page Avenue, with an additional focus on the utilization of landscape to improve stormwater runoff. The estimated total project costs for the Phase II Improvements is $653,775. The funding is composed of both federal and local dollars and is expected to proceed into design in the Fall of 2013.
THE ST. VINCENT GREENWAY PROJECT

The fundamental purpose of the Great Rivers Greenway District is to make the St. Louis region a better place to live by creating a clean, green, and connected region. As one of GRG’s key projects, the St. Vincent Greenway will extend for more than seven miles from NorthPark, near I-70 and Hanley Road, to Forest Park. The greenway route will include completed sections through the University of Missouri-St. Louis campus and the adjoining St. Vincent (County) Park. At Forest Park, St. Vincent Greenway will eventually connect to other greenways, such as Centennial, Chouteau, and River des Peres.

To date, GRG has constructed and / or planned for the St. Vincent Greenway to the north and south of the City of Pagedale. Through the three (3) Pagedale Determined projects (Great Streets, Rock Road TOD Planning, & Ferguson Healthy Corridor), there is the opportunity to complete the full regional connection from UMSL to Forest Park. Furthermore, GRG had vast interest in the success of this process and was an major ally in the Great Streets Initiative through the provision participatory input and funding of a portion of the study.

OTHER: ROCK ROAD TOD PLANNING & FERGUSON HEALTHY CORRIDOR

A Transit-Oriented Development (TOD) Plan for the Rock Road Metrolink Station
In partnership with EWG the Regional Plan for Sustainable Development, CMT, and the Des Lee Creating Whole Communities Initiative, Beyond Housing led a participatory design process that met residents where they are to understand their desires for the station. Led by resident input, a plan for mixed land use will likely result from this process when it is completed simultaneously in June of 2013.

A Healthy Corridor on Ferguson Avenue
This project will activate the spaces along the corridor that connects the Page Avenue and Rock Road MetroLink transit-oriented development. Through infrastructure development, programming, and a Complete Streets policy campaign, this project will serve as the connective tissue for a “town center” that will be a hub of activity for Pagedale and surrounding communities. Funding for the Healthy Corridor is provided in full by Missouri Foundation for Health through a three year grant which is expected to be complete in November of 2015. MFH is a philanthropic organization whose vision is to improve the health of the people in the communities it serves.
The consultant team for the Page Avenue Great Streets Initiative was further charged to perform a series of assessments and reviews on the existing conditions of Page Avenue. These assessments range from an engineering evaluation of the existing traffic volumes and levels of service to a more observational public realm analysis and public life survey. The assessments were conducted to provide the team with (1) a clear record of the existing on-the-ground conditions of the street today, (2) an analytical understanding of how traffic and other circulation is occurring throughout the project area, (3) a general sense of the market realities surrounding future development of the corridor, and (4) a refined understanding of the opportunities along Page Avenue. This section of the report is dedicated to the documentation of that process, and its purpose is to formulate a set of opportunities and constraints by which the Detailed Street Plan would operate.
As our team began to analyze the existing conditions of the project area for the Great Streets Initiative, it became important for us to frame that area within a broader context. On the one hand, a detailed street-level analysis of every curb, trip hazard, and stormwater inlet will be critical to the final design of the project. However, on the other hand, understanding the role that Page Avenue assumes within this broader context will ensure the necessary cross-municipal relationships, regional connectivity, and strategic positioning necessary to ensure the success of the plan.

In one simple example of this planning approach, our transportation engineers conducted a detailed analysis of the traffic volumes, signalization, and capacity of the roadway for Page Avenue. This was conducted at every intersection from North Hanley Road to Skinker Parkway, extending significantly beyond the project area. This broader analysis of Page Avenue would provide the consultant team with a holistic understanding of how Page Avenue operates today within the regional transportation network, while also ensuring that decisions made at the smaller scale would not compromise that role. The following analysis is representative of this approach.
The “Context Area” is defined as the area bound on the north by St. Charles Rock Road / Dr. Martin Luther King Jr Drive, on the east by North Skinker Parkway / Kienlen Avenue, on the south by Olive Boulevard, and by North Hanley Road on the west.

Basic Details:
- Total Acreage of the Context Area = 2,261 square acres
- Total Perimeter of the Context Area = 8.11 Miles
- Length of Page Avenue within the Context Area = 2.5 Miles
- Total # of Intersections within the Context Area = 14
Topography & Watersheds
When looking at the topography of the context area, it is important to note that the area is bisected by two creeks which end up feeding into the River Des Peres system. At the east end of the project area, the River Des Peres North Branch is daylighted and crosses Page Avenue; and on the west end near Ogden Avenue, the Engelholm Creek heads south and joins the same system. These creeks are the likely cause of the high water table and known drainage issues in the area; which for instance, have resulted in the need for residents living in the neighborhoods to utilize sump pumps. Furthermore, there is a high point in the natural topography which occurs near Gruner and Gregan Place. This would signify that the majority of natural water run-off would be heading west through the project area. This high point offers positive features such as a broad view shed for vehicles headed into the district, while also creating pedestrian conflict points due to limited visibility over the hill.

Parks & Open Space
When looking at open space coverage within the context area, it is important to note that the project area falls within a fairly underserved area. Firstly, when applying national standards for walkable park service areas (1/4 mile for pocket parks and playgrounds and 1/2 mile for neighborhood parks); it is clear that the project area lacks access to these types and scales of spaces. With respect to larger parks and open spaces, the area falls within the service area (3.5 mile driving radii not shown) of two major community parks, St. Vincent and Heman Parks; however, these parks are not walkable and fall far beyond the distances in which a resident would likely walk. Secondly, many streets are disconnected within the neighborhoods due to the creeks, which increases walking distances and isolates the project area even more. Thus, within the project area there is a great opportunity to include small neighborhood or pocket scale parks in the form of a town square, green, or plazas.

Greenways & Trails
When looking at connectivity and recreational opportunities for bicycles within the area, it is important to note that the City of Pagedale falls within a fairly significant gap in the regional network. In particular, to the north of the area much of the St. Vincent Greenway has been constructed in and around the UMSL campus. To the south, portions of the same greenway have been completed along Etzel Avenue and through Porter Park onto Debalivere, where the greenway will eventually connect to Forest Park. Additionally, the Gateway Bike Plan (completed in 2011) calls for wide outside lanes on Page Avenue as a minimum operating condition; and bike lanes on Ferguson Avenue and Kingsland Avenue included in the University City Bicycle & Pedestrian Master Plan are still pending adoption which leaves implementation uncertain at best. Thus, within this project, there is a great opportunity to fill in one of the gaps in this regional connectivity and enhance and expand the existing network of on-street bicycle facilities.
Metrolink & Metrobus
When looking at the transit connections within the context area, it is important to note that both Metrobus coverage and access to Metrolink are incredibly good for the project area. The area is located within one (1) mile of both the St. Charles Rock Road and Wellston stations, providing great access to Metrolink. The #94 bus provides east-west service along Page Avenue throughout the entirety of the project area, and the #2 bus (not shown) provides north-south service along Ferguson Avenue. Furthermore, the #94 bus provides a direct connection to the downtown Amtrak Station and the Westport Plaza employment center and although headways on the #94 are a little higher than typical routes (22-40 minutes), it is considered a high-priority route for METRO and offers great inter-modal connectivity with the Wellston Metrolink station. Thus, transit coverage and access to transit from the project area are, overall, quite good, which provides opportunity for transit-oriented development.

Zoning & Municipalities
When looking at the jurisdictional characteristics within the context area, it is important to note that the entirety of the project area is located within the City of Pagedale. At the very east end of the Project Area, the street transitions into the City of Wellston and eventually into the City of St. Louis. To the west, the majority of the area remains within the City of Pagedale, where near North Hanley, portions are located within the City of Hanley Hills and Venita Terrace. This condition has little impact on the project itself. However, from a transportation planning level, decisions within the project area may cause “upstream” effects into these municipalities. Described later in this section in greater detail, all private property would be subject to the municipal code Chapter 405: Zoning Regulations, which have limitations on building height, use, and form along Page Avenue. Thus, the City of Pagedale will be the primary regulating entity for the land along the project area.

Street Network & Intersections
When looking at the continuity of the street network within the context area, it is important to note that Page Avenue is the primary regional connector between St. Charles County and the City of St. Louis. Page Avenue (MO Route D) is owned and maintained by the Missouri Department of Transportation (MODOT). Within the regional street classification system for Missouri roads, there are four functional systems for urbanized areas including (1) principal arterials, (2) minor arterial streets, (3) collector streets, and (4) local streets. Page Avenue is considered a principal arterial, along with other streets like St. Charles Rock Road and Olive Boulevard. Thus, it will be necessary to understand the role of Page Avenue as a principal arterial and critical to ensure that its role is not compromised within this broader network. The following section on the next page of this report documents the greater analysis of Page Avenue’s role in that network done by our transportation engineers.
A GREATER LOOK AT PAGE AVENUE IN THE REGIONAL NETWORK

Before developing the vision plan for Page Avenue, it was necessary to establish the existing traffic conditions within the context area. The Great Streets Initiative project area extends from Pennsylvania to Sutter Avenues. However, in order to better understand the function of this roadway within the greater context of the region, a planning-level traffic assessment was prepared in addition to a traffic study. The area-wide traffic assessment summarizes the existing and anticipated future function of Page Avenue between I-170 and the City of St. Louis. This assessment included a review of traffic demands and characteristics within this corridor as well as complementary parallel facilities including St. Charles Rock Road and Olive Boulevard.

**Existing Roadways**

Page Avenue serves as an east-west corridor that currently runs from Mid Rivers Mall Drive in St. Peters to Dr. Martin Luther King Drive in the City of St. Louis. It carries Missouri Route 364 to the west of I-270 and Missouri Route D between I-270 and Kingshighway. In St. Louis County, Page Avenue is located approximately midway between Interstate 70 to the north and Interstate 64 to the south.

Page Avenue is classified by the East-West Gateway Council of Governments as a principal arterial from east of Lindbergh Boulevard into the City of St. Louis. The roadway generally consists of a four-lane cross section, with several segments within the study area providing a fifth center lane to serve left turns. It is under the jurisdiction of the Missouri Department of Transportation.

Page Avenue serves multiple purposes in the area. The roadway is heavily used by local traffic to access the residential streets and commercial land uses adjacent to and within close proximity of the corridor. Numerous businesses in the study area have open-curb access, and parking is provided on the shoulder in many areas. It also serves as a commuter route for east-west travelers and an alternate to I-70 and I-64, particularly during times of construction or incidents when it is utilized by MoDOT as a diversion route. Page Avenue is a favorable option for I-270 and I-170 travelers due to its direct access to these interstate and its direct path into the City. In addition, Page now extends into St. Charles County as Missouri Route 364, offering an additional Missouri River crossing and an eight- to ten-lane freeway.
Historical Traffic Patterns

Historical traffic counts for Page Avenue, St. Charles Rock Road, and Olive Boulevard were obtained to provide insight on average daily traffic levels and to estimate the amount of growth the City of Pagedale could expect in the near future. Shown above for reference, Olive Boulevard historically carries the highest volumes with approximately 17,000 to 22,000 vehicles per day, while Page Avenue and St. Charles Rock Road each historically carry around 12,000 to 15,000 vehicles per day.

While most pronounced on Olive Boulevard, all three routes exhibited a downward trend in traffic volumes between 2002 and 2008. However, in 2009 all three routes experienced an increase in average daily traffic (ADT). This jump is likely attributable to the I-64 reconstruction project, as the interstate was closed to the east of I-170 in 2009, diverting traffic to alternate routes. Many motorists continued to use the arterial routes after the closure, which resulted in lower volumes on I-64 after its reconstruction than pre-closure.

Based upon these historical traffic counts, it is reasonable to assume that daily traffic volumes on Page Avenue within the study area are likely to remain steady or decrease slightly for the foreseeable future. Without significant changes in adjacent land use or major constraints on parallel arterial routes, the demands for through traffic on Page Avenue appear to be decreasing slightly over time.

Historical traffic volumes were also obtained for St. Charles Rock Road (which becomes Dr. Martin Luther King Boulevard) and Page Avenue to the east of Kingshighway Boulevard to gain knowledge about traffic volumes on these routes within the City of St. Louis. These traffic volumes are shown above for reference.

While the two arterials carried similar daily traffic volumes near the Great Streets study area, the graph indicates that Page Avenue maintains volumes above 10,000 and typically around 12,000 to 13,000 vehicles per day to the east of Kingshighway, while St. Charles Rock Road (known as Dr. Martin Luther King Drive within this area) carries only approximately 4,000 vehicles per day. These two routes are located very close to each other in this area, which indicates that Page Avenue is the preferred route further to the east within the City.
Traffic Study Parameters

The traffic study evaluated conditions along Page Avenue during the typical morning and afternoon peak periods of weekday commuter traffic. These times represent the critical periods for traffic flow in the study area. It may be reasoned that if traffic can be accommodated during these peaks, then sufficient capacity should be available throughout the remainder of the week. All signalized intersections from Hanley Road to Skinker Parkway were included in the operational analysis, as they encompass the core area and provide a broader context of traffic conditions on each end of the corridor. Including all signalized intersections within the study also facilitated the evaluation of signal operations and traffic progression.

Existing Roadway Conditions

The roadway network was inventoried with respect to existing roadway configurations (the number and type of lanes as well as the length of turn bays), access locations, and traffic control. As stated previously, Page Avenue is owned by the Missouri Department of Transportation and is classified by the East-West Gateway Council of Governments as a principal arterial. Within the context area, Page Avenue is generally a five-lane roadway with two through lanes and a center two-way left-turn lane (TWLTL). There are two segments in which Page Avenue has a four-lane cross section with no center left-turn lane: between Hanley Road and Pennsylvania Avenue and between Sutter Avenue and Ogden Avenue. It has a posted speed limit of 35 miles per hour.

Page Avenue provides access to residential streets as well as both defined driveways and open-curb access to commercial uses throughout the study corridor. There are several segments in which parking is accommodated on the roadway shoulder. Hanley Road and Skinker Parkway are heavily travelled north-south corridors and are classified as principal arterials. The intermediate intersections of Pennsylvania Avenue, Ferguson Avenue, and Ogden Avenue are classified as urban collectors; Sutter Avenue is classified as a local road. All unsignalized intersections along the study corridor are also classified as local roads with the exception of Kingsland Avenue, which is an urban collector. Operational parameters for traffic signals (phas-
ing and timings) were noted since Page Avenue operates as a coordinated signal system. According to the Missouri Department of Transportation (MODOT), these signals will have new timings installed in the near future, though the date of implementation is unknown.

In general, most intersections operate with protected-permissive left-turn phasing (green arrow followed by a green ball indication) with exceptions at Hanley Road and Skinker Parkway. At Hanley Road, Page Avenue operates with protected-only left-turns due to its angled alignment at the intersection. At Skinker Parkway, Page Avenue operates with leading eastbound left turns due to constraints created by the existing signal equipment. It is our understanding that this signal is to be reconfigured in the spring/summer of 2013 to allow concurrent left-turns.

**Existing Traffic Volumes**

Existing turning movement counts were collected at the six signalized intersections within the study area from 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m. on a typical weekday in January 2013 to capture the morning and evening commuter peak periods. The count data was summarized, and peak hours were established for the study area based on the heaviest four consecutive, 15-minute increments. It was determined that the existing morning and afternoon peak hours of traffic flow are 7:30-8:30 a.m. and 4:30-5:30 p.m. While traffic counts were not performed at the unsignalized intersections, it could be assumed that they carry minimal traffic during the peak hours.

Traffic volumes on Page Avenue are generally bi-directional during both peak hours. Page Avenue carries approximately 700-850 vehicles during the morning peak hour and approximately 1,050-1,200 vehicles during the afternoon peak hour. Trucks and buses make up approximately 5% of peak hour traffic volumes on Page Avenue with the composition varying slightly at individual locations. Specifically, trucks accounted for approximately 1.8-3.0% of peak hour traffic, while buses represented 1.8-4.3% of recorded traffic flows.
Existing Operating Conditions

Capacity analyses were performed to quantify existing operating conditions at each of the study intersections. The capacity of an intersection is quantified by Levels of Service (LOS), which are measures that reflect the average delay that motorists encounter at each intersection. Standards dictate that there are six levels of service, ranging from LOS A (“free flow”) to LOS F (“oversaturated”). LOS C, which is commonly used for design purposes, represents a roadway with volumes utilizing approximately 70 to 80 percent of its capacity; whereas LOS D is widely considered an acceptable standard for peak period conditions in urban and suburban areas.

As can be seen on the chart on this page, all of the intersections throughout the context area have acceptable overall operating conditions during the morning and afternoon peak periods (LOS D or better). The northbound and southbound approaches of Hanley Road experience LOS E conditions during the peak hours due to relatively heavy north-south through volumes and the fact that priority is given to the east-west progression on Page Avenue. Within the project area, the signalized intersections of Page with Ferguson and Sutter Avenues operate favorably. In fact, conditions are LOS B or better overall during both peak periods. In addition, all of the unsignalized intersections within the core area also operate at LOS B or better during the morning and afternoon peak periods.

This evaluation of the existing operational conditions along Page Avenue indicates that there is ample capacity for the existing traffic volumes and to some extent a great deal more capacity on the roadway than is currently necessary. In fact, the existing roadway could in many locations serve up to two (2) or three (3) times as much traffic with little or no affect on the service levels throughout the area. In effect, this means that there is an opportunity to reduce the number of travel lanes along Page Avenue and utilize that additional space for place-making. This additional space can be used for beautifications measures like landscaped medians, conveniences such as on-street parking, widening of sidewalks, or the addition of transportation modes like bicycles. This place-making component of the roadway is the essence of the Great Streets Initiative.
A GREATER LOOK AT THE ECONOMICS OF THE CONTEXT AREA

The challenges of realizing an economically thriving and revitalized Page Avenue corridor are numerous, but demand for quality, affordable housing is not among them. Rather, it is the economic barrier of delivering housing of the quality and permanence necessary to catalyze economic prosperity—at prices and rents that Pagedale residents can afford—that underlies the greatest challenge to realizing a physical transformation of one of the community’s most visible and prominent streets. This points to the need for subsidies, in some form, to underwrite quality building development that residents can afford. Yet the problems that hinder the economic performance of Page Avenue and Pagedale are more complex and cannot be resolved with physical improvements alone. The poor physical appearance of Page Avenue is symptomatic of unfavorable policies and socioeconomic challenges facing Pagedale residents. It is the physical manifestation of a community with the interrelated problems of low incomes, low educational attainment (on average), the cycle of household poverty, and high unemployment/lack of access to jobs. Fortunately, as previously noted, Pagedale is served well by Beyond Housing, an organization committed to engaging in a holistic set of best practice interventions that involve investments in buildings and people in an effort to set the table for greater future prosperity and economic performance for the community.

Opportunity and Place-Making
One of these interventions (and the subject of this study) involves taking advantage of changing demographics and preferences that make the transformation of Page Avenue—into a walkable, livable, human-scaled street with a strong sense of place—a more marketable, catalytic, and economically viable concept and strategy than it has been any time in at least a generation. Over the past decade, a measurable positive market response has been well-documented in areas with great character and a strong sense of place (i.e., main streets, town centers, walkable neighborhoods, traditional neighborhoods, historic districts, transit-oriented development) in the form of better property appreciation for property owners, greater retail traffic, greater desirability as a location for employers, and greater real estate revenues (which make quality development more economically viable).
Economics and Policy: Empowerment without Displacement

These investments in place along Page Avenue can therefore be leveraged, as part of a broader effort, to help stimulate the economy of Pagedale. Sometimes, where placemaking efforts are truly transformative, concerns over gentrification or unaffordable property tax structures are warranted.

Yet, in Pagedale, where (1) median home values are estimated at $67,000, (2) new construction homes (which cost $175,000 to build) do not sell for more than $100,000, and (3) rents are so depressed that developers cannot deliver quality replacement housing, avoidance of best-practice efforts at community building are certain to ensure continued economic stagnation and decline. After all, a property owner is not going to invest in a new $20,000 roof if that roof presents one-third of their property value and they are unlikely to recoup that investment in the form of a higher resale value. Similarly, a rental landlord is not going to invest in the maintenance of their property if rents are not sufficiently high to cover payment of debt service and operations.

Gentrification is a real concern for many communities, but in Pagedale, continued disinvestment and deterioration represents a far greater, immediate, and real threat. What is needed is a two-pronged strategy: one that helps improve the physical appearance and desirability of the community (thus increasing property values) and one that empowers existing residents with the tools to get more education and earn greater incomes, to ensure they are a part of Pagedale's transformation as opposed to being displaced as a result.

A real estate development strategy can be woven into both efforts. Increased property values lead to households building home equity—the single greatest way middle class families build wealth. Further, as Beyond Housing makes long-term efforts in increasing economic opportunities for its residents (with efforts such as early childhood education), a broader diversity of housing and commerce will be necessary to keep Pagedale’s upwardly mobile residents within the community instead of seeking desirable locations elsewhere (as their personal finances improve). In a very real way, improving the economy and desirability of Page Avenue can lead to Pagedale’s self-empowerment in keeping its residents and prevent losing them through displacement as a result of gentrification.
Apartments: A Thread in the Tapestry

During the civic engagement process of the plan for Pagedale, a concern emerged around the addition of rental housing. Central among the thoughts expressed by residents were fears over increased crime brought on by renters and high density housing. Yet studies and research show that, when controlling for a number of social variables, rental housing is often unfairly stigmatized—that rental housing does not necessarily bring elevated levels of crime with it. In fact, quality property management—something that Beyond Housing is expert at—is cited as one of the biggest determinants to the degree to which rental housing is associated with criminal activity. After all, rental housing serves a diverse group of residents, the overwhelming majority of which are not criminal. In fact, most people rent at some point in their lives.

Given the conclusion of this study—that rental housing has the deepest market and is, out of necessity, an important thread in the tapestry that is the strategy to revitalize Pagedale—it seems worthwhile for the community to keep an open mind regarding this potential land use.

Real Estate Market Analysis and Market Strategy

Market analysis conducted in 2013 concluded that demand for quality affordable housing in Pagedale and North St. Louis County is deep—almost unlimited. Affordable properties such as Arlington Grove and North Sarah lease-up quickly and often operate with waiting lists. Demand comes from a number of groups, including working families, which are present in unusually high numbers in Pagedale.

But other market segments exist, including seniors and young singles. These latter two groups are generally underserved in Pagedale, because 95 percent of its housing stock consists of single family homes. Smaller housing formats, such as apartments, would help Pagedale retain and attract these two groups.

Market rents for smaller units at these properties have sometimes reached one dollar per square foot—a figure that was perhaps unthinkable at those locations before quality development was provided. The greatest challenge is therefore not market-based, but economically based. Pagedale must compete for a finite amount of tax credits and other incentives to help underwrite the development of housing that is consistent with the quality of housing necessary to project permanence and serve as the catalyst the community needs.

Quality for-sale housing is also in high demand. Yet, recent projects such as Glenechort homes have not performed well, both in terms of sale price and absorption, due to tightened lending standards. This makes the delivery of large amounts of new for-sale housing along Pagedale particularly challenging. Further, subsidies for for-sale housing (primarily through HOME funds) are so scarce that it makes it unlikely that more than five for-sale homes can be delivered to the market in any given year.

Commercial development opportunities have improved considerably with the addition of the new Save-A-Lot store that can serve as an anchor for other retailers and service-oriented stores and vendors. Retail opportunities can be further enhanced with efforts to increase on-street park-
ing, widen sidewalks and slow traffic speeds, to create an inviting pedestrian realm, as well as improve quality of place, with new, street-oriented buildings and a better sense of enclosure.

Retail tenanting opportunities consist largely of casual (but not fast food) restaurants, coffee and ice cream shops, and a limited number of apparel shops and community services (such as bank branches and a Laundromat).

An opportunity also exists for a health clinic—either along Page Avenue or at Rock Road Metro-link station. Currently, there is a lack of such facilities in the vicinity of Pagedale, and the new Affordable Health Care for America Act (AHCAA) promises to provide health insurance to those who previously lacked it. As a result, communities such as Pagedale will likely represent a growth opportunity for health care providers in the future.

### Real Estate Program and Strategy

A real estate program is impacted not only by market demand, but economics. This study concludes that demand for quality affordable housing is almost unlimited. A quality two-bedroom unit with 850 square foot would find many prospective renters in Pagedale if priced at $650 per month but few if it were priced at $1,050 per month. Further, a wood-frame construction, three-story walk-up apartment building costs less to build, on a per square foot basis, than a five-story elevator property with concrete frame construction. Therefore, the availability of subsidies and the realities of economics play very strong roles in determining the shape, type, quality, and amount of real estate development possible along Page Avenue. Based on these considerations, it can be determined that the following development program be reasonable over a period of 10 to 12 years.

- **300 to 400 units** of mixed income (and largely rental) housing, generally at a scale of two to four stories
- **20,000 to 30,000 square feet** of inline retail to complement the Save-A-Lot grocery store
- **Up to 40,000 square feet** of medically-related space, either on Page Avenue or at Rock Road Station

### Market Conclusions

In order to fully transform Page Avenue and convert existing vacant and underutilized properties (including outside storage uses and blighted shopping centers) into higher and better uses, new development must meet and satisfy both market and economic principles. 20,000 to 30,000 square feet of new retail would be transformative in that such development has not occurred in Pagedale for many decades. Effective use of New Markets Tax Credits (NMTC) and/or local programs such as tax increment financing (TIF) and community improvement districts (CID) can be leveraged to ensure that rents are reasonable in high quality commercial spaces.
Yet this commercial opportunity would require only a relatively small amount of land in the Page Avenue corridor. The same is true for a medical facility. Therefore, transforming Page Avenue in its entirety, a must in terms of improving the economic opportunities for the whole of the community, will require development of the use that is in greatest demand—housing.

Whether it is rental housing or for-sale housing, subsidies will be required to deliver a quality product to the market. While the Low Income Housing Tax Credit (LIHTC) program is fairly robust in the amount of money allocated statewide toward providing quality mixed-income housing, programs aimed at subsidizing for-sale housing are very limited. Therefore, while for-sale housing could be a small component of a real estate program for Pagedale, rental housing is an essential piece of a strategy to improve the appearance and functionality of Page Avenue. With good property management, resident concerns about rental housing can be addressed, and it can be an asset in improving the physical appearance and economic performance of the community.

There are several catalyst projects that should be undertaken in the short-term, in order to make other types of development more likely or more valuable in subsequent phases. They include:

- **Leisure Anchor/Leisure Uses:** an anchor, such as a cinema, would benefit a broader retail program by generating traffic. Restaurant uses would be complementary to the cinema, and represent one of the best market-based retail program opportunities. The cinema should be located within a few blocks of the intersection of Ferguson and Page.

- **Civic Square/Village Green:** in new town center developments, developers recognize the value of meaningful public space as a civic anchor, which helps increase traffic and benefit business and home values. This would, ideally, be located near Ferguson and Page.

- **Public Market:** a public market that provides traffic and customers for area entrepreneurs is a centerpiece of an economic enhancement strategy for Page Avenue and Pagedale. It, too, should be located near the civic square, leisure uses, and supermarket because each generates traffic in a complementary way.

- **Housing:** Housing is the biggest long-term opportunity for revitalizing the corridor because it is the land use with the deepest pool of demand. In the early going, a first phase of development should be included in the core, or center, of Page Avenue to integrate the public market, village green and other commercial businesses with the community.
SUMMARY OF THE CONTEXT AREA ANALYSIS

In summary, the purpose of this contextual review is to provide the team with a working knowledge of the physical planning adjacencies, transportation relationships, and market realities surrounding both the project area and the City of Pagedale. Understanding and planning for these broader contextual relationships is an important aspect of the Great Streets Initiative. Furthermore, place-making within the project area is dependent upon ensuring that these connections and relationships are observed and leveraged.

The following list of opportunities and constraints shown on this page was developed by the consultant team in order to summarize the contextual review of the project area and provide a framework for developing the Detailed Street Plan.

CONSTRAINTS

- Page Avenue serves an important regional function, so care must be given to ensure proper justification with a lane reduction.
- Traffic signal coordination will require the majority of the “green time” at intersections to be given to east-west through traffic.
- Trail connections to the north of Page Avenue may require the evaluation of alternate routes for the on-street bike connections.
- Bike connections should be established within the context of the regional network, including greenways and on-street facilities.
- Development program for the broader context area is limited; thus care must be given to the allocation of this throughout the entire area.

OPPORTUNITIES

- There is great opportunity for the project area to provide parks and open space to serve the broader context area.
- This street can increase the overall capacity for stormwater retention, providing some relief to the surrounding neighborhoods.
- Excess capacity at core intersection provides an opportunity to investigate lane reduction through the entire area.
- Defined parking areas can enhance business patronage and provide controlled access throughout the entire area.
- Great opportunity for multi-modal enhancements with the excess in the 100 R.O.W. which can connect into the broader transportation network.
- There is a great abundance and demand for quality housing in the context area.
- Metrobus service through the Pagedale area is quite good, and the project serves as an opportunity to increase ridership and upgrade and relocate the facilities accordingly.
A CLOSER LOOK AT THE PROJECT AREA

Along with developing an analysis of the broader context area, it is also important for the consultant team to develop a detailed catalog of on-site conditions including information such as utility locations, conditions of sidewalks, pedestrian barriers, and roadway hazards. Over the course of a one month period, the team conducted a series of assessments of the existing conditions along Page Avenue. There were four (4) basic components to this project area analysis which include: an on-site right-of-way conditions survey, a utilities and infrastructure survey, an urban design analysis, and a public life survey.

Great Streets Urban Design Analysis

As part of this portion of the analysis, the team conducted and documented the visual assessments into a set of components. These components were combined into a comprehensive Great Streets Urban Design analysis which is exhibited here in summary. Greater details and full deliverables created for these components of the analysis are included in the appendices of this report for reference.

When asked “What type of general street improvements do you think are most needed along Page Avenue?” community survey respondents said...

21.1.3% said they think sidewalk improvements and amenities

15.6% said they think new crosswalks and pedestrian ramps

16.7% said they think street and pedestrian lighting

16.1% said they think trees and landscaping elements
DISTRICT GATEWAYS & SYMBOLIC ENTRIES
Gateway entries are important to defining the entry points into a district or great street. They signify the arrival to a new type of destination or place (such as town center), and often involve a physical differentiation or transition in land uses. This diagram is a catalog of the key intersections, entry points into the area, and opportunities for creating gateways.

OPEN SPACE OPPORTUNITIES & EXISTING ACTIVE AREAS
Open and public spaces such as plazas or parks are a major component of great streets. Important to note, there are no public spaces existing in the area. Furthermore, in an area such as this, it is important to build on any existing activity sites. This diagram is a composite of active sites throughout the corridor and potential opportunity sites for public spaces.

GREEN INFRASTRUCTURE & NATURAL SYSTEMS
Green infrastructure is a part of all great streets, especially as environmental stewardship becomes increasingly more important to our social well-being. Important to note, almost 100% of the right-of-way for Page Avenue is impervious surfaces which do not allow for groundwater recharge. This diagram shows the lack of green systems in the project area.

BUILDING FORM & BUILT-OUT FRONTAGE
The existing build-out of the community is important to understand, as there is opportunity to leverage existing positive elements of the urban form such as zero lot line buildings. This diagram notes areas where there is existing positive urban build-out and other areas where there is opportunity to build frontage out and create a high-quality urban environment.
BUILDING ARTICULATION & BLOCK DIVERSITY
The block structure and cadence of building form along the street is an important part of the character of a great street. Larger lots with insensitive building facades can reduce the confidence of pedestrians and have negative effects on the perceptions of walkability. This diagram highlights diversity in lot sizes, building frontages, and opportunities for infill development.

ALTERNATIVE TRANSPORTATION & MULTI-MODAL ACCESS
Connections to multiple-modes of transportation, including bikes, buses, and trains, are a major component of great streets. Access to these systems will facilitate a vibrant pedestrian realm and increase economic activity in the areas. This diagram annotates major connections to the bike & trails network, adjacencies to the Metrolink, and access to Metrobus.

STREETSCAPE & UTILITIES INFRASTRUCTURE
Identifying the locations of existing infrastructure is important to great streets, as building on existing assets and improvements to the built environment will be key during project implementation. This diagram notes the location of all utilities within the project area including water, electricity, gas, sewer, fire hydrants, benches, streetlights, utility poles, mailboxes, and trees.

STREET WALKABILITY & SIDEWALK CONDITIONS
The existing conditions of sidewalks and pedestrian amenities is an important component of great streets. Good walking conditions, slopes, and connectivity will facilitate a life on the streets and encourage more walking. This diagram catalogs the conditions of the existing sidewalks including materiality, ada accessibility, crosswalks, slope, condition, and enhancement opportunities.
Public Life Survey Counts
In addition to the exhaustive catalog of existing conditions within the project area, the consultant team also conducted a more analytic assessment of the current non-motorized uses and movements along Page Avenue. The purpose of the Public Life Survey is to glean a detailed understanding of how pedestrians and cyclists are currently using Page Avenue. In order to achieve this, the consultant team gathered information on items including: How many people there are on the street at given times; pedestrian movement patterns throughout the project area; typical walking routes and common paths of travel; and active pedestrian destinations.

The first portion of the public life survey took place on Saturday March 9th and Monday March 11, 2013. Three locations along Page Avenue were observed for twelve minutes each hour, and the pedestrian movements were mapped around the location. Saturday’s measuring times were 11am to 2 pm; and 5 pm to 8 pm, which are essentially the typical peak hours for activity. Monday’s measuring time was 8 am to 8 pm. A summary map of this is located on the following page and depicts pedestrian movements in and around the surveyed points.

Shown above, the resulting pedestrian counts are extrapolated to full hour estimates (based on multiplication of the observed pedestrians x 5). These counts provide an estimate of the volume and active hours of pedestrian activity in the project area. The following are the general observations about the pedestrian movements:

**Monday: Table 1**
- There is a peak in activity when children get out of school around 3 pm, and this higher level of activity continues through and into the evening.
- There is a lull in activity in the middle of the afternoon between 12 pm and 2 pm.

**Saturday: Table 2**
- Location 3 has a concentration of small local businesses and often has high foot traffic.
- All locations are generally more active in the evening rather than at midday.
- Location one has large variations in number of pedestrians.
Public Life Survey Observations

- The **SOUTH SIDE OF THE STREET HAS MORE PEDESTRIAN ACTIVITY** than the north side of the street.
- The most **ACTIVE DESTINATIONS ON PAGE AVENUE** are: PAGEDAILE MEAT MARKET, SAVE-A-LOT, P-X LIQUORS, PRINCE’S BEAUTY SUPPLY, AND FAMILY DOLLAR.
- **ALLEYS BETWEEN KINGSLAND AND SUTTER ARE OFTEN USED BY PEDESTRIANS TO ACCESS PAGE AVENUE** from the south because the streets are closed and the alleys are not.
- Pedestrians often **CUT THROUGH THE SAVE-A-LOT PARKING LOT TO GET INTO THE NEIGHBORHOOD** or to Ferguson Ave.
- More people use **KINGSLAND TO ACCESS NEIGHBORHOODS** to the south rather than on Ferguson Avenue.
- Sidewalks are well used, but the **LACK OF CROSSWALKS MAKES SAFELY CROSSING THE STREET DIFFICULT** and inconvenient.
- **PEDESTRIAN SIGNALS AT INTERSECTIONS ARE RARELY OBEYED**.
- Pedestrians often use the **TWO WAY CENTER TURN LANE AS A MID-STOPPING POINT TO CROSSING PAGE AVE.** when it’s busy.
- Because of the topography Page Ave. in CER-
- **TAIN AREAS IS DIFFICULT TO CROSS SAFELY BECAUSE OF LIMITED VISIBILITY**.
- Surveys indicate that **MANY PEOPLE THAT PATRONIZE THE SMALL BUSINESSES VISIT THE ESTABLISHMENTS DAILY**.
- In warmer weather, **SMALL PARKING LOTS OUTSIDE OF THE SMALL BUSINESSES ACT AS SOCIAL GATHERING SPACES** for regular customers.
- The **WEATHER HAS A MAJOR EFFECT ON HOW MANY PEDESTRIANS USE THE STREET**. With nice weather on Saturday, there were many more people walking on the street. With cold and dreary weather on Monday, there were much fewer people walking.
- **BUS STOPS LACK AMENITIES** and often you cannot tell if someone is loitering or waiting for the bus.
- **CYCLISTS WERE NOT AS COMMON AS COMMON AS PEDESTRIANS**, but a few were observed on Ferguson and on Page Avenue.
- **NO SENIORS WERE SEEN WALKING TO OR FROM THE NEW ROSIE SHIELD’S MANOR**.
- **It’s VERY DARK IN THE EVENING AND NIGHT** and tall and dim light fixtures make it very difficult to see pedestrians and vehicles.
Community Walk & Mobility Audit Observations & Recommendations
Described here in brief, the Community Walk & Mobility Audit provided stakeholders of the planning process an opportunity to participate directly in plan development with the consultant team. The result of the audit was a list of critical observations (shown below) and set of recommendations (shown to the right) which was developed by the team to address the identified issues. The full report for this portion of the study is included as an appendices to this report.

- Crosswalk markings are missing at most intersections
- Due to the way the storm drainage is handled, there are no curbs, curb cuts or defined driveways
- Sidewalks and pavement is in fair to poor condition
- Storm drains are poorly placed and create tripping hazards (the one on Belrue Ave is an example)
- Street lacks street trees and other landscaping to provide shade and human scale
- Bus stops are signs only, no shelters or seating areas
- ADA compliance is minimal or completely lacking in some areas (island at the NW corner of Ferguson Ave is an example)
- There is very little litter for such an urban area, some properties had private trash cans for public use
- There are two school bus stops in this area (Woodruff / Ferguson), with no seating or shelter provided
- Lack of curbs makes it seem like the cars can pull up on the sidewalk in any location, which makes for less comfortable walking
- Parking is allowed in the paved terrace area, but this leads to some vehicles parking over the sidewalk

RECOMMENDATIONS

**EARLY ACTION ITEMS:**

- Crosswalks should be added to connect existing curb ramps at the signalized intersections of Page Avenue (All approaches of Pennsylvania and Ferguson, and the south approach to Sutter.)
- Signing should be added on the approaches to intersections with crosswalks added for vehicles to yield for pedestrians in crosswalks.
- Add signed and marked mid-block pedestrian crossings at Kingsland and Purcell including solar rapid flashing beacons.
- Add shared lane markings for bike accommodation on Page Avenue, centered on the right most through lane of travel.

**GENERAL ITEMS:**

- Implement access management along the corridor delineating entrances clearly from public right of way to private property and define pedestrian crossings clearly across driveways.
- Narrow travel lanes to no more than 11 feet.
- Included planted medians where access management or turning movements are not needed to calm traffic and maintain at 30-35 mph travel speed.
- Provide shared lane markings in the through lanes.
- Provide greenway/shared use path in the corridor to accommodate the greenway connection from the south that will enter the corridor at Sutter, and connect to the future urban greenway along Ferguson Avenue.
- Provide separated and/or raised pedestrian facilities along page Avenue in the corridor.
- Provide distinct and protected approaches to minor streets along Page Avenue.
- Provide connections from pedestrian ways along Page venue to land uses in the corridor that eliminate the need to walk in driveways.
- Provide distinct parking areas for on street parking along Page Avenue that eliminate parked cars from impeding pedestrian travel.
- Provide mid-block crossings of Page Avenue, between signalized intersections.
- Include bus stop amenities such as benches, trash receptacles and covered stop areas
- Include street trees and greenspace along the corridor to address stormwater control and minimize intrusion of stormwater features in pedestrian ways or bikeways in the corridor.
- Include pedestrian scale lighting, in addition to roadway lighting in the corridor, and light side street intersections, as well as major intersections.
- Include short term and long term bike parking at new businesses
- Provide trail crossing signage and markings for the future greenway at all side streets and crossing of Page Avenue.
- Provide wayfinding signage along the corridor.
- Include design of bus stops in coordination with Metro to provide effective connections between the bus stops and sidewalks, and the bus stops with vehicle operations on the roadway.
SUMMARY OF THE PROJECT
AREA ANALYSIS: KEY FINDINGS

• Throughout the length of the project area there are very few formalized curbs and sidewalk areas which makes walking very unsafe.
• There is opportunity to utilize various traffic calming techniques to create a safer environment
• Pedestrian facilities may include improvements such as additional signalized crossings, further adding to the safety of the street
• Many of the side streets which connect into the neighborhood have dead ends or are blocked at the ends, which prevents pedestrian and vehicular connectivity.
• In the project area, there are many pedestrian ramps which do not meet ADA requirements.
• There are many areas where sidewalks are non-existent or in very poor condition, especially connecting into the neighborhood.
• Access management and the realignment and/or consolidation of driveways provides an opportunity to enhance safety and capacity
• There are no landscape features with the public right-of-way for Page Avenue.
• The area is served well by two bus lines, one along Page Avenue connecting to Metrolink and the Amtrak Station downtown.
• There are a number of existing bus stops within the project area, consisting primarily of signage only and no amenities.
• Active transit along Page Avenue is an asset, but proper roadway facilities must be provided in the form of two through lanes & pullouts
There are multiple utilities located underground along both the north and south.

The endorsed Gateway Bike Plan calls for minimum bicycle facilities that connect to the regional network. Improvements to separated facilities such as greenways or bike lanes should be considered with roadway improvements.

Bike routes have been planned for Ferguson Avenue and Kingsland Avenue from University City. However, this plan is not adopted and implementation is uncertain.

The St. Vincent Greenway has been planned to reach Page Avenue on the south side of the street and will likely cross the bridge over Metrolink into the project area.

Connections to trail network should utilize signalized crossings to provide safe connections.

There is uncertainty on the location where the St. Vincent Greenway will proceed north to the Rock Road Station.

Much of the east side of the project area is located within 1/4 to 1/2 mile from the Wellston Metrolink Station, making this area ideal for transit-oriented development.

There are many large, vacant lots spread throughout the project area, especially on the north side of the street.

Much of the frontage along Page Avenue is not built out, and the zoning facilitates setback development and reduced walkability.

The existing zoning code is cumulative in nature, encourages setback buildings, and does not allow for a mix of uses.
Throughout the planning process, the consultant team spoke with numerous residents, business owners, property owners, and leaders within the community. The purpose of this open dialogue with the stakeholders was to catalog a comprehensive list of issues and ideas for the project, develop a collective vision for the Page Avenue Great Streets Initiative, and identify a set of specific goals for the community to which the project will aspire. As previously described, there were a number of forums from which these discussions occurred, including project steering committee meetings, individual interviews, technical group meetings, and open public meetings. Within these various constituent groups, there were many diverse discussions about the future of Page Avenue and the collective vision. This section of the report reflects the comprehensive documentation and culmination of these visioning discussions.
From the visioning perspective, there is a lot of information which was important to extract from the community in order to ensure that the final plan will meet their aspirations. As the first part of that process, the consultant team met individually with local business owners, property owners, residents, and local leaders in order to develop a comprehensive list of issues for the plan to address and ideas for the plan to explore. This collective list was then prioritized with the stakeholder committee in order to understand “what issues were of most concern” and “what ideas were most achievable”. From the direction provided by the committee, a draft vision statement and list of project goals were developed for public review. This vision statement and plans were vetted at the public meeting, and the project goals were prioritized. This reiterative process and open discussion with the Community continued. The following is the comprehensive list of issues and ideas, the vision statement, and the project goals for the Page Avenue Great Streets Initiative.

-Keypad Polling Results
**ISSUES**

**HIGH PRIORITY:**
- Accessibility for the elderly and disabled community members
- Sidewalks are in poor condition and there are no safe places to walk on the street
- Not enough places and activities for families and related activities
- Derelict properties and vacant sites are causing a decline in property values
- Many buildings and structures have maintenance and cosmetic issues
- Lack of quality housing, housing variety, and housing opportunities in the area
- Lack of recreation and open space opportunities in the area
- Variable character of Page Avenue throughout the project area needs addressing
- Auto-oriented and suburban types of uses along street detracts from visual appeal
- Traffic and vehicles move too fast along Page Avenue
- Frequent property access points and the dependency on the turn lane
- Full length of the project area cannot all be commercial, retail or mixed land uses
- “Hodge-Podge” qualities of the existing buildings and urban form
- Safety concerns regarding pedestrian and cyclist crossings along Page Avenue
- Lack of pedestrian crossing facilities which creates a huge safety hazard
- Page Avenue is wide road and is unsafe for crossing at intersections

**LOW PRIORITY:**
- Lack of funding for the street and streetscape improvements
- Page has a variety of different vehicular needs including cars, buses, and trucks
- Lack of formalized on-street parking and clear areas designated for parking
- Consideration for maintenance of the street and streetscape improvements
- Lack of pedestrian access to the area from the adjacent neighborhoods and streets
- Considerations for capacity of the roadway with future development
- Page Avenue is an older arterial road which serves a vital role in the network
- Page Avenue cannot become a bottleneck for traffic in the area
- Future projects must bring much needed revenues and tax into the area
- Challenges to getting the private market and developers to take risk in the area
- Time length of streetscape construction and the impact on existing businesses

**IDEAS**

**HIGH PRIORITY:**
- Include more general dining and restaurant opportunities in the project
- Include more shopping and neighborhood services in the project
- Improvements including new wide sidewalks, lighting, & landscaping
- Demolish vacant or condemned buildings along Page Avenue
- Encourage a more harmonious mix of retail and commercial uses
- Focus on development around the intersection of Ferguson & Page Avenue
- Connect St. Vincent Greenway through the area along Page Avenue
- Focus town center between Ferguson & Kingsland Avenues
- Establish urban design guidelines for use, height, and setback for future buildings
- Incorporate a neighborhood clinic with basic office spaces
- Establish a mix of uses to provide much needed neighborhood services
- Consider community gardens, farmers markets, or community orchards
- Incorporate on-street parking into street design for convenience and safety
- Provide enhancements at the existing bus stops and potentially add additional stops
- Provide more formal civic and public spaces including parks or plazas

**LOW PRIORITY:**
- Incorporate a community space and clinic focused on healthy and active living
- Consider potential public library or cyber cafe for the neighborhood
- Investigate Ferguson north and Kingsland north as possible St. Vincent Bike Routes
- Establish unique identity points to create a sense of place
- Ensure accessibility for the elderly and disabled throughout the plan
- Provide pocket parks and smaller green spaces throughout the area
- Provide a variety of housing opportunities and choices along Page Avenue
- Include more places and spaces for kids and youth programming
- Build upon existing community assets and vibrant places with enhancement
- Create multi-modal cross section and streetscape design
- Consider mid-rise buildings surrounding the intersection of Page & Ferguson
- Consolidate parking areas in new developments and limit access points
- Focus on accommodating the existing places where pedestrians are crossing
- Consider spaces for creative arts and cultural expression like music & dance
The vision for Page Avenue is to establish a social, economic, and environmentally vibrant “heart of the community” which will provide a safe and interactive place for community members and residents of all ages from youth to older adults to gather collectively; access a variety of commercial services (dining, entertainment, and retail) and healthy activities; and celebrate the City of Pagedale.”

-The residents and stakeholders of the City of Pagedale
PROJECT GOALS

- Establish a long-term social, economic, and environmentally sustainable place (96%)
- Establish a beautiful and accessible streetscape with a variety of amenities (93%)
- Establish a variety of opportunities for healthy-active living and access to health services (90%)
- Establish a place with dining, retail, entertainment opportunities (81%)
- Establish a street that serves all types of transportation, including pedestrians (81%)
- Establish a family friendly destination with a variety of activities for all ages (80%)
- Establish a centralized “heart of the community” in Pagedale (77%)
- Establish a mixed-income area of high-quality rental and high-quality for sale housing (76%)
- Establish a variety of public spaces for people to gather, socialize, interact, and celebrate (73%)
- Establish a place which will increase property values and foster home ownership (59%)

NOTE: This list of goals was prioritized by the attendees of the public meeting. X% indicates what percentage of attendees believed that the goal should be a high priority for the project.
Based on the vision statement which was established with the project steering committee and stakeholders, the consultant team then structured three (3) different “plan options” for public review. These plan options were developed to assist the community in achieving the project goals which had been established; as well as, address the particular issues identified within the community and explore the variety of ideas which had been brought forth during the discussions. These plan options were vetted with the public through work-sessions and keypad polling sessions conducted at the meetings, and goals were prioritized. Following this input, the consultant team developed a “preferred plan” and worked with the project steering committee to refine the details. This refined plan was then presented to the public for final input. The Page Avenue Vision Plan contained within this section of the report is the culmination of that public planning process.
A VISION FOR A BALANCED ROADWAY: LAND USE & TRANSPORTATION

The Vision Plan for Page Avenue aspires to establish a social, economic, and environmentally sustainable “heart of the community” for the City of Pagedale and its visitors, workers, and residents. The vision plan recommends the creation of a vibrant mixed-use center on Page Avenue to provide the community with a variety of much-needed neighborhood services including dining, retail, office, and entertainment opportunities. This new town center will be focused between Buckner Avenue and Kingsland Avenue, where the design for the right-of-way for the street will be driven by place-making strategies. The Vision Plan and its critical elements are shown on the following page for reference.

As part of the place-making strategy, the area will be signified by celebratory gateway entries, distinctive branding strategies, and a variety of traffic calming measures to establish a sense of arrival into the town center. Areas beyond the town center will provide supportive housing and residential areas which will provide a transition in uses and intensities that further enhance the entryway experience into the district. Through the Great Streets Initiative, this place-making is achieved by harmonizing the design of roadway with the use of the adjacent land.

77% of attendees believe that there should be a high priority to “establish a centralized ‘heart of the Community’ in Pagedale.”

-Keypad Polling Results
As revealed by the analysis of existing conditions, much of the existing streetscapes are lacking, the roadway is over-sized (with a very large right-of-way) and conditions for pedestrians and bicyclist are very unfavorable, and in some conditions extremely unsafe. Further compounding this sense of expanse, the existing buildings along much of the roadway are in poor condition, are not well lit (from the street or otherwise), and are in most cases setback from the street great distances. Furthermore, there is no real streetscape existing, even insofar as curbs along the street. In essence the roadway has been designed (“design speed”) for vehicles to travel at a much higher rate of travel than currently posted on the roadway. All of these qualities have established a roadway which is unbalanced in favor of high-speed automobile travel, as opposed to other modes such as walking or bicycles.

The purpose of the Vision Plan is to rebalance that roadway appropriately by signifying pedestrians and bicycles as a legitimate and civilized form of transportation; as well as, strategically matching the design of the roadway with the Community’s desired future functions. This Vision Plan recommends a design for the right-of-way and character for the new developments which will establish a new sense of place along Page Avenue, triggering a shift in perceptions for vehicles travelling through the area.

This shift in the built environment established by the roadway and adjacent development will have significant influence on the character of the area, as well as major impacts on the safety of the street. Regardless of posted speed limits, this environmental change and direct adjustment of the design speed will result in substantially reduced vehicular and pedestrian conflict points, as well as fatality and injury rates related to pedestrian crossings. The proposed streetscape elements which are integral to this Vision Plan will further reduce the design speed by providing the passing vehicles with visual cues and environmental deterrents to speeding. In essence, the new streetcape along Page Avenue will act as the moderator between the modes of transportation (“transportation”) and the activities of the related land (“land uses”).

The Vision Plan was established to provide the Community with the roadway design and land use strategies necessary to achieve their vision and goals, while also rebalancing the roadway to integrate all modes of transportation.
COLOR LEGEND

- Mixed-Uses
- Multi-Family Residential Type 1
- Multi-Family Residential Type 2
- Existing Single Family Uses (A)
- Existing Commercial Uses (C)
- Open Space | Parks | Plazas | Squares
- Surface Parking
- Streets & Alleys
When asked “What type of street improvements are most needed along Page Avenue?” community survey respondents said...

21.1% said sidewalk improvements & amenities
15.6% said new crosswalks & pedestrian ramps
16.7% said street & pedestrian lighting
11.5% said bicycle lanes & facilities
17.8% said new buildings or developments
16.1% said trees & landscaping

THE ELEMENTS OF THE VISION PLAN

THE RIGHT-OF-WAY PLAN
This element of the plan defines the main structure of the roadway including lanes, parking, medians, sidewalks, and amenities zones.

THE GREEN INFRASTRUCTURE PLAN
This element of the plan defines all of the green aspects of the project including bio-retention, stormwater management, and lighting strategies.

THE TRANSPORTATION IMPROVEMENTS PLAN
This element of the plan defines all of the public transportation aspects of the project including upgrades and modifications to bus infrastructure.

THE BICYCLE AND PEDESTRIAN IMPROVEMENTS PLAN
This element of the plan defines all of the alternative transportation aspects of the project including crossings, bike lanes, and greenways.

THE FUTURE LAND USE PLAN
This element of the plan defines all of the recommended land uses adjacent to the project area including residential, commercial, mixed-uses, and open spaces.
THE RIGHT-OF-WAY PLAN

As the major component of this project, the right-of-way for Page Avenue must be calibrated correctly in order to ensure that the design of the street is in harmony with the future vision established with the Community. Through this visioning process and the emergence of the Town Center as the driving force behind the vision, the right-of-way for Page Avenue must be designed to support the creation of this vibrant mixed-use center. In order to identify the locations and structure for the supportive roadway, the consultant team developed this Right-of-Way Plan.

The Right-of-Way Plan defines all of the basic components of the roadway which would be contained within the right-of-way for Page Avenue in order to facilitate the vision. The structure of the roadway would include all elements of the cross-section including things like sidewalks, landscape areas, on-street parking, travel lanes, bike lanes, greenways, and medians. This element of the plan is primarily described through the use of the right-of-way plan (shown above) which designates the geographic locations for a particular cross-section of the roadway. Each cross-section shown on the following pages will facilitate the character and uses defined by the vision established with the Community.

When asked “What are the most important issues to address on Page Avenue?” community survey respondents said...

20.1% said hazardous and poor conditions of the streets & sidewalks
5.6% said lack of access to Metrolink & Metrobus
20.8% said vacancy and run down property along the street
13.2% said general perceptions of safety & comfort in the area
9.4% said lack of access to parks & trails
18.8% said lack of things to do or places to spend time
4.2% said too much street traffic & congestion on the roads
7.9% said traffic moves too fast through the area
CROSS-SECTION W2: FROM PENNSYLVANIA AVENUE TO BUCKER / LEROY AVENUE

This portion of Page Avenue can be described as the “western gateway” into the Town Center area. The cross-section is structured to support a future residential area with appropriately sized sidewalks, pedestrian scaled lighting, increased stormwater / bioretention areas, on-street parking, travel lanes, and a landscaped median as necessary to provide for safe crossings and beautification. This portion of Page Avenue should include, at minimum:

- Two (2) Travel Lanes (one either direction) at eleven (11’) feet wide
- One (1) Two-Way Center Turn Lane (including aprons) at sixteen (16’) wide
- Landscaped Center Medians, as necessary (to match TWCTL)
- Two (2) Dedicated Bike Lanes (one either direction) at six (6’) feet wide
- Two (2) On-Street Parking Lanes (one either side) at eight (8’) feet wide
- Two (2) Landscape / Bioretention Zones (one either side) at twelve (12’) feet wide
- Two (2) Sidewalks (one either side) at five (5’) feet wide
CROSS-SECTION W1: FROM BUCKER AVENUE TO FERGUSON AVENUE
This portion of Page Avenue can be described as the western Town Center area. The cross-section is structured to support a mixed-use area with wide decorative sidewalks, pedestrian & vehicular lighting with area branding, urban landscaping and tree grates, on-street parking (or right turn lanes, as needed), travel lanes, and a landscaped median for turn lanes (when necessary), beautification, and safe crossings. This portion of Page Avenue should include, at minimum:

- Two (2) Travel Lanes (one either direction) at eleven (11’) feet wide
- One (1) Landscaped Center Median with Left Turn Lane, as necessary, at sixteen (16’) wide
- Two (2) Dedicated Bike Lanes (one either direction) at six (6’) feet wide
- Two (2) On-Street Parking Lanes (when possible) at eight (8’) feet wide
- Two (2) Landscape / Bioretention Zones (one either side) at eight (8’) and twelve (12’) wide
- Two (2) Sidewalks (one either side) at nine (9’) and eleven (11’) wide
CROSS-SECTION E1: FROM FERGUSON AVENUE TO KINGSLAND AVENUE (SOUTH)

This portion of Page Avenue can be described as the eastern Town Center area. The cross-section is structured to support a mixed-use area with wide decorative sidewalks, pedestrian & vehicular lighting with area branding, urban landscaping and tree grates, a multi-purpose trail, on-street parking (or right turn lanes, minimal), travel lanes, and a landscaped median for turn lanes (when necessary), beautification, and safe crossings. This portion of Page Avenue should include, at minimum:

- Two (2) Travel Lanes (one either direction) at twelve (12') feet wide
- One (1) Landscaped Center Median with Left Turn Lane, as necessary, at eighteen (18') wide
- One (1) Multi-Purpose Trail (on the south side of the street) at ten (10') feet wide
- Two (2) On-Street Parking Lanes at eight (8') feet wide
- Three (3) Landscape / Bioretention Zones (one on north; two on south) at six (6’) wide
- Two (2) Sidewalks (one either side) at seven (7’) wide

NOTE: The area between Kingsland Avenue north and south has the same section, with the exception that the landscape / bioretention areas are to be more residential in nature with continuous tree lawn and raingardens, and street lights are to be pedestrian-scaled lighting.
CROSS-SECTION E2: FROM KINGSLAND AVENUE (SOUTH) TO SUTTER AVENUE

This portion of Page Avenue can be described as the “eastern gateway” into the Town Center area. The cross-section is structured to support a future transit-oriented development area with appropriate sized sidewalks, pedestrian-scaled lighting, increased stormwater/bioretention areas, on-street parking, a multi-purpose trail, travel lanes, and a landscaped median as necessary to provide for safe crossings and beautification. This portion of Page Avenue should include, at minimum:

- Two (2) Travel Lanes (one either direction) at eleven (11’) feet wide
- One (1) Landscaped Center Median, as necessary, at eleven (11’) wide (not including aprons)
- One (1) Multi-Purpose Trail (on the south side of the street) at ten (10’) feet wide
- One (1) One-Way Driveway (south of the trail) with Angled Parking
- Three (3) Landscape/Bioretention Zones (one on north; two on south) at various widths
- One (1) Sidewalk (on the north) at five (5’) wide

NOTE: This specifically denotes the relationship between the property owners on the south side of the street (NEFF Press) and the Greenway. The purpose is to provide guidance on how to detail the one-way driveway for vehicle service and access in coordination with the Greenway.
THE GREEN INFRASTRUCTURE PLAN

As an important element of the project, the Green Infrastructure Plan highlights all of the recommended environmentally friendly strategies to be included in the Vision Plan.

These strategies call for a mixture of approaches which will provide beautification to the project area, identify the Town Center with a unique character, reduce light pollution and heat island effect, build the grand nature of the entry ways into the area, increase local groundwater infiltration, and reduce the overall of stormwater inflow into the municipal stormwater system.

Stormwater reduction is achieved in the Vision Plan through the use of pervious sidewalks throughout the area, pervious parking lanes within the Town Center, landscaped medians throughout the project area, raingardens / bio-retention areas, increased tree canopy, tree lawn areas within the neighborhoods, alleys with porous paving, and public spaces with pervious pavements. And to a greater extent, adequately sized planting beds will increase porosity while also providing a greater level of soil volume to allow trees and plants to reach full maturity.

Simultaneous with the reduced stormwater effects, the increase of porosity (such as porous
pavement and parking areas), reduction of hard-scaping (such as concrete and asphalt), and increased shade from tree cover will lower ambient air temperatures at ground level and effectively minimize heat island effect on the streetscape. Additionally, the effective placement of trees and full cut-off fixtures in streetlights can establish the Town Center, while also providing an adequate level of safe lighting at the street level and reducing light pollution and building trespass.

Even beyond this, there are a number of indirect results from these streetscape strategies. A right-of-way design which has been “right-sized” with an enhanced streetscape will establish a sense of enclosure, increase safety, calm the traffic, and reduce emissions. Furthermore when street signalization and roadway capacity has been coordinated effectively, there is less vehicle idling and rapid acceleration which will lead to better air quality and reduced sound pollution.

This multi-approach to the implementation of the Green Infrastructure Plan and improvements to the public realm will reduce degradation to the environment, increase local pride and social capital, and encourage economic development; which will collectively result in an overall increase in a sustained quality of life for the Community.
When asked “What type of streetscape elements would you most like to see along Page Avenue?” community survey respondents said...

28.6% said environmentally friendly solutions (like trees, planters, flowers)
15.0% said arts & cultural elements (like signature art, sculptures)
13.2% said bicycle amenities (like bike racks, signage)
10.4% said on-street parking (parallel or angled)
21.0% said character lighting (for pedestrians and vehicles)
12.4% said district branding (like “Welcome to Page Avenue!”)

RECOMMENDED GREEN INFRASTRUCTURE STRATEGIES

(1) Pervious Sidewalks
Pervious Sidewalks capture water and allow it to seep into the underlying soil where it is naturally filtered. This reduces runoff, flooding, erosion, and the subsequent transportation of contaminants into our waterways. Air flow through its surface also allows evaporation, which helps to mitigate solar heat gain and the urban heat island effect.

(2) Pervious Parking Lanes
Pervious Parking Lanes serve to manage stormwater in the same ways that Pervious Sidewalks do. By allowing stormwater to percolate and replenish groundwater, pervious paving utilizes and encourages the natural processes of the hydrological cycle, including the filtration of motor oils and chemicals by naturally occurring microorganisms present within soils.

(3) Landscaped Medians
Landscaped medians incorporate trees and other plantings that contribute to the benefits of green infrastructure. In addition to managing stormwater, landscaped medians help to cool urbanized areas, improve air quality, and beautify streetscapes. (for varietals, see Recommended Plantings & Maintenance section of this report)

(4) Tree Coverage & Canopy
Trees not only absorb precipitation through their leaf and root systems, but they also protect pedestrians from rain, sun exposure, and heat. Lower urban air temperatures that result from
good tree cover, and can significantly reduce energy costs to homeowners and consumers. Additionally from a cost benefit perspective, street trees are one of the lowest expenditures (with an approximately 7 - 70 year expectancy) and have the most benefit to land values. (for varietals, see Recommended Plantings & Maintenance section of this report)

(5) Raingardens / Bioretention Areas
Rain gardens & Bioretention areas are designed to retain, clean, and reduce the volume of stormwater runoff before it is either infiltrated or discharged. Suspended solids are trapped and removed while pollutants are filtered or absorbed by the soils and plant material. Rain gardens should also contain native and local plant varietals which establish deep root systems which will eventually require very little water and maintenance. Furthermore, rain gardens contribute the character and visual appeal of the streetscape by providing a natural relief to the urban environment. (for varietals, see Recommended Plantings & Maintenance section of this report)

(6) Continuous Tree Lawn
The advantages of Tree lawns or planting strips include: aesthetics, increased pedestrian safety and comfort, and room for trees and other streetscape amenities. A continuous tree lawn increases the amount of greenspace and resulting benefits to storm water management and heat reduction. This strategy is specifically necessary to utilize on side streets in combination with rain gardens to enhance the aesthetic appeal of the neighborhood from Page Avenue. (for varietals, see Recommended Plantings & Maintenance section of this report)

(7) Green Alleys
Green Alleys further contribute to the reduction of impermeable surfaces and the costs of treating stormwater. Recycled materials can be used for their construction, and energy efficient light fixtures can reduce glare and light pollution.

(8) Full Cut-Off Street Lights
Full Cut Off Lighting reduces the negative effects of lighting on nighttime environments. By directing light so that no level of intensity reaches a 90 degree angle (horizontal) or higher, the fixtures reduce glare, light pollution, and light trespass (through windows or onto property, for example). Higher control over the direction of light also allows lower wattage lamps to be more efficient and effective, potentially reducing energy consumption and costs.

(9) Pervious Open Space / Plazas
Other than all of the aforementioned benefits of reducing impermeable surfaces, pervious open spaces and plazas, when constructed with pervious pavement systems, can increase pedestrian safety due to improved winter and wet weather pavement conditions. Additionally, more sustainable materials can require less maintenance.
PRELIMINARY STORMWATER MANAGEMENT CALCULATIONS

With the strategies identified in the Vision Plan, the consultant team made some preliminary estimates regarding the reduction of stormwater runoff. This evaluation was conducted to ensure that the design for the right-of-way would increase infiltration and would not add any additional burden into the municipal system. This evaluation was conducted for the right-of-way within the entire project area. The following are the results:

Assumptions:

- Does not take into account porous sidewalks & paths
- Does not take into account porous parking areas
- Does not take into account existing soil analysis
- Does not take into account compaction of existing soil
- Does not take into account existing vegetation
- Does not take into account strata of rainscaping plants
- Does account for engineering soil inclusion
- Does account for perennial rainscaping plants & trees
- Does account for overflow into main stormwater lines

Calculations:

Existing Roadway:  
419,245 SF / 9.62 AC

Proposed Roadway:  
391,546 SF / 8.98 AC

Existing Plantings:  
NONE / 0

Proposed Raingardens:  
28,932 SF / 0.66 AC

Proposed Median Areas:  
20,309 SF / .47 AC

Proposed Tree Lawn (on Side Streets):  
18,600 SF / 0.43 AC

Raingardens Required on Proposed Roadway:  
1.14 x 1.05 x 8.9887 / 12 = 0.896 AC

Conclusions:

Not accounting for any porous paving (for parking areas, sidewalks, and pathways), the raingardens (0.66 AC) and medians (0.47 AC) would capture a total of 126% of the anticipated rain capture requirements for the new design, sufficiently meeting the requirements by the Metropolitan Sewer District. The additional stormwater strategies will further increase infiltration, and further reduce runoff into the municipal system.
## RECOMMENDED PLANTINGS & MAINTENANCE

As part of the Green Infrastructure Plan, the consultant team also developed a set of recommended maintenance measures for all of the plantings utilized throughout the area. The charts on these pages highlight all of the information necessary to identify, plant, irrigate, fertilize, and maintain the plantings. See the Green Infrastructure Plan for the recommended locations for the plantings. Larger versions of these charts are located in the appendices of this report.

### TOWN CENTER - SHADE TREE PLANTINGS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering</th>
<th>Pruning</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>London plane</td>
<td>Platanus x hollandica</td>
<td>25-30'</td>
<td>Full</td>
<td>April</td>
<td>Regular watering in fall to establish. I want them to bloom in May.</td>
<td>May</td>
<td></td>
</tr>
</tbody>
</table>

### FLOWERING TREE PLANTINGS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering</th>
<th>Pruning</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinkoi</td>
<td>Prunus serrulata</td>
<td>15-20'</td>
<td>Full</td>
<td>April</td>
<td>Regular watering in fall to establish. I want them to bloom in May.</td>
<td>May</td>
<td></td>
</tr>
</tbody>
</table>

### SHRUB PLANTINGS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering</th>
<th>Pruning</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knockout rose</td>
<td>Rosa ‘Kruis Out’</td>
<td>5-9'</td>
<td>Full</td>
<td>May-Sept</td>
<td>Regular watering in fall to establish. I want them to bloom in May.</td>
<td>May</td>
<td></td>
</tr>
</tbody>
</table>

### PERENNIALS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering</th>
<th>Pruning</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian sage</td>
<td>Spiraea alpifolia</td>
<td>18-2'</td>
<td>Full</td>
<td>July</td>
<td>Regular watering in fall to establish. I want them to bloom in May.</td>
<td>July</td>
<td></td>
</tr>
</tbody>
</table>

### GROUNDCOVERS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering</th>
<th>Pruning</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>Centranthus</td>
<td>4-5'</td>
<td>Full</td>
<td>April</td>
<td>Regular watering in fall to establish. I want them to bloom in May.</td>
<td>April</td>
<td></td>
</tr>
</tbody>
</table>

### CHART A - RECOMMENDED PLANTINGS AND MAINTENANCE FOR THE TOWN CENTER

### CHART B - RECOMMENDED PLANTINGS AND MAINTENANCE FOR THE LANDSCAPED MEDIANs

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**To view larger versions of these charts, see the appendices of this report.**
<table>
<thead>
<tr>
<th>Full Grown Plant Image</th>
<th>Plant ID</th>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering/irrigation type</th>
<th>Deadheading</th>
<th>Fertilization</th>
<th>Cutback</th>
<th>Thinning</th>
<th>Pruning</th>
<th>Insect and Disease Control</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PAGE AVENUE RAIN GARDENS-TREES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black epoxy sassafras</td>
<td>50-75</td>
<td>Full Sun</td>
<td>N/A</td>
<td>Late Spring</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Azalea reticulata</td>
<td>40-70</td>
<td>Full Sun</td>
<td>April-March</td>
<td>High water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>prunes back foliage</td>
</tr>
</tbody>
</table>

**PAGE AVENUE RAIN GARDENS-GRASSES**

<table>
<thead>
<tr>
<th>Full Grown Plant Image</th>
<th>Plant ID</th>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering/irrigation type</th>
<th>Deadheading</th>
<th>Fertilization</th>
<th>Cutback</th>
<th>Thinning</th>
<th>Pruning</th>
<th>Insect and Disease Control</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Carex morrowii</td>
<td>2-3</td>
<td>Full Sun</td>
<td>June-July</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Spreads through rhizomes. Can be in 5&quot; pots.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carex stricta</td>
<td>2&quot;</td>
<td>Full Sun</td>
<td>June-July</td>
<td>Medium water requirements. Needs full sun.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Spread through rhizomes.</td>
</tr>
</tbody>
</table>

**CHART C - RECOMMENDED PLANTINGS AND MAINTENANCE FOR THE RAIN GARDEN TREES & GRASSES**

<table>
<thead>
<tr>
<th>Full Grown Plant Image</th>
<th>Plant ID</th>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering/irrigation type</th>
<th>Deadheading</th>
<th>Fertilization</th>
<th>Cutback</th>
<th>Thinning</th>
<th>Pruning</th>
<th>Insect and Disease Control</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Echinacea purpurea</td>
<td>2-3</td>
<td>Full Sun</td>
<td>July-September</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3yr. Establishment needed. Cut back any woody plant materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Echinacea pallida</td>
<td>2-3</td>
<td>Full Sun</td>
<td>July-September</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3yr. Establishment needed. Cut back any woody plant materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rudbeckia fulgida</td>
<td>2-3</td>
<td>Full Sun</td>
<td>July-September</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3yr. Establishment needed. Cut back any woody plant materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Liatris spicata</td>
<td>2&quot;</td>
<td>Full Sun</td>
<td>July-September</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3yr. Establishment needed. Cut back any woody plant materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phlox drummondii</td>
<td>2-3</td>
<td>Full Sun</td>
<td>July-September</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3yr. Establishment needed. Cut back any woody plant materials</td>
</tr>
</tbody>
</table>

**CHART D - RECOMMENDED PLANTINGS AND MAINTENANCE FOR THE RAIN GARDEN PERENNIALS**

<table>
<thead>
<tr>
<th>Full Grown Plant Image</th>
<th>Plant ID</th>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering/irrigation type</th>
<th>Deadheading</th>
<th>Fertilization</th>
<th>Cutback</th>
<th>Thinning</th>
<th>Pruning</th>
<th>Insect and Disease Control</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Zelkova ‘green w tree’</td>
<td>50-70</td>
<td>Full</td>
<td>April-May</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>pruning back to form central leader and only dead branches</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quercus macrocarpa</td>
<td>90-00</td>
<td>Fall</td>
<td>April</td>
<td>Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>pruning back to form central leader and only dead branches</td>
</tr>
</tbody>
</table>

**SIDE STREETS- TREE LAYER PLANTINGS**

<table>
<thead>
<tr>
<th>Full Grown Plant Image</th>
<th>Plant ID</th>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering/irrigation type</th>
<th>Deadheading</th>
<th>Fertilization</th>
<th>Cutback</th>
<th>Thinning</th>
<th>Pruning</th>
<th>Insect and Disease Control</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Carpinus caroliniana</td>
<td>1-2</td>
<td>Full</td>
<td>May-July</td>
<td>Medium water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>pruning back to form central leader and only dead branches</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carpinus papyracarpa</td>
<td>1-2</td>
<td>Full</td>
<td>May-July</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>pruning back to form central leader and only dead branches</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prunus serrulata</td>
<td>4-12&quot;</td>
<td>Spring</td>
<td>June</td>
<td>Medium water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>pruning back to form central leader and only dead branches</td>
</tr>
</tbody>
</table>

**SLOPES (5%)**

<table>
<thead>
<tr>
<th>Full Grown Plant Image</th>
<th>Plant ID</th>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Height</th>
<th>Sun</th>
<th>Bloom Month</th>
<th>Watering/irrigation type</th>
<th>Deadheading</th>
<th>Fertilization</th>
<th>Cutback</th>
<th>Thinning</th>
<th>Pruning</th>
<th>Insect and Disease Control</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Rhododendron ‘pro-haw’</td>
<td>2&quot;</td>
<td>Full</td>
<td>April-May</td>
<td>Low water need. Tolerant of most soil types.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>pruning back to form central leader and only dead branches</td>
</tr>
</tbody>
</table>

**CHART E - RECOMMENDED PLANTINGS AND MAINTENANCE FOR THE SIDE STREET TREES AND GRASSES**
THE TRANSPORTATION IMPROVEMENTS PLAN

As an important element of the project, the Transportation Improvements Plan highlights all of the recommended modifications, upgrades, and additions to the infrastructure for Metrobus within the project area. This plan primarily calls for reconfigurations and upgrades to a number of existing Metrobus stops within the area. This would entail moving the location of the stop, adding a dedicated bus lane (where street parking would be removed to accommodate), and providing the stop with a shelter, benches, trash cans, and other basic amenities to facilitate a comfortable experience for the riders.

Other considerations include the relocation of several of the existing stops to more strategic locations within the Town Center. For example, we are recommending to move the current stop at Kingsland Avenue (on the north) to the west of Kingsland Avenue (on the south) in order to provide a safe crossing area within the Town Center. Additionally, we are recommending plazas adjacent to a few of the more prominent multi-modal stops, such as the southeast intersection of Ferguson Avenue and Page Avenue where the St. Vincent Greenway will end at a Metrobus stop and transit plaza. All of the recommendations within this plan are shown above.

When asked “What do you think about the Metrobus stops along Page Avenue?” community survey respondents said...

- **22.5%** said I think we need more Metrobus stops to service the area

- **42.2%** said I think the existing Metrobus stops need more shelter and protection from the weather

- **22.5** said I think the existing Metrobus stops need more amenities, like benches and bike racks

- **12.3%** said I think the existing Metrobus stops need better signage & identity
THE BICYCLE & PEDESTRIAN IMPROVEMENTS PLAN

As an important element of the project, the Bicycle and Pedestrian Infrastructure Plan highlights all of the components of the Vision Plan which will enhance the walking experience along Page Avenue, increase safety for crossing, and provide the essential amenities for the street experience such as benches and trash cans. Furthermore, this plan highlights all of the bicycle facilities within the Vision Plan including the St. Vincent Greenway alignment, dedicated on-street bike lanes, and the necessary bicycle signage. These improvements will not only connect the Town Center into the regional network of trails and local network of bicycle facilities, they will more importantly connect the immediate neighborhoods and residents to the north and south directly to Page Avenue. This strategy builds on the notion that the real impetus behind a great street is the great neighborhood that supports it. Shown on this page, the Bicycle and Pedestrian Improvements Plan contains a variety of elements to achieve this, which include the following:
COLOR LEGEND

- St. Vincent Greenway
- Bike Lanes (On-Street)
- Shared Lane Markings
- Sidewalk Crossings (for the Greenway)
- Driveway Crossings (for the Greenway)
- Conflict Striping & Intersection Markings
- New Sidewalks
- Pedestrian Crosswalks
- High Visibility Crosswalks with Rapid Flash Beacons
- Crosswalks & Audible Tone Pedestrian Indicator
- ADA Ramp | Tactile Strips
- Trash Receptacles
- Short Term Bike Racks
- Benches | Seating
- Informational Kiosks
RECOMMENDED BICYCLE & PEDESTRIAN IMPROVEMENTS

(1) St. Vincent Greenway
The St. Vincent Greenway will consist of a two-way, separated bicycle and pedestrian facility on the south side of Page Avenue. The Greenway will cross MetroLink on the bridge (adjacent to the existing pedestrian walkway) and proceed along the south side of the street to the intersection of Page Avenue and Ferguson Avenue, eventually, through alternate planning processes, connecting north to the Rock Road Metrolink Station. See appendices for Details & Site Furnishings.

(2) Bike Lanes (On-Street)
Bike lanes designate an exclusive space for bicyclists through the use of pavement markings and signage. The bike lane is located adjacent to motor vehicle travel lanes and is used in the same direction as motor vehicle traffic.

(3) Shared Lane Markings
Shared lane markings (SLM’s), also known as “sharrows”, are often used on streets where dedicated bike lanes are desirable but not possible due to physical or other constraints. Such markings delineate where bicyclists should operate within a shared vehicle/bicycle travel lane.

(4) Sidewalk Crossings (for the Greenway)
Sidewalk crossings for greenways often use signage, lighting, surface markings, and/or grade changes to increase the visibility and awareness between vehicular and bike/pedestrian traffic. Intersections must provide adequate warning to both parties of potential points of conflict and clearly designate who has the right of way.

(5) Driveway Crossings (for the Greenway)
Driveways are a common sidewalk obstruction, especially for wheelchair users. When constraints only allow curb-tight sidewalks, dipping the entire sidewalk at the driveway approaches keeps the cross-slope at a constant grade.

(6) Conflict Striping & Intersection Markings
Green bike lane conflict zones alert drivers of the possibility of bicyclists in locations where a vehicle may be making a turn. Accompanying signage indicates intended user behavior. Intersection markings transition bike lane from curb-adjacent to the inside of the right turn lane using dashed pavement markings and signage (MUTCD R4-4).

(7) New Sidewalks
Good sidewalks are important for many reasons. For one, they allow better access and mobility to children and the elderly, as well as people using wheelchairs, strollers and carts. They also play an important role in pedestrian safety, providing protection from both weather hazards and motor vehicle traffic.

(8) Pedestrian Crosswalks
Designating Pedestrian Crosswalks creates a safer street environment, especially for children, the elderly, and the disabled. There are a number of options for accommodating pedestrians according to the crosswalks’ specific locations and needs, but generally, pedestrian crosswalks are designed to reduce vehicle speeds and to highlight more visibly to motorists areas where pedestrians may be crossing. When combined with a road diet and median refuges, crosswalks can significantly increase safety by reducing crossing distances.
(9) High Visibility Crosswalks (with Median Refuge & Rapid Flash Beacons)
The refuge island has an at-grade passage through the island rather than ramps and landings. The island should be at least 6’ wide to accommodate bikes with trailers and wheelchair users and be a min. of 20’ long. Since speeds are higher than 25 mph on Henry Street, double centerline markings, reflectors, and “KEEP RIGHT” signage should be used. RRFB’s (Rectangular Rapid Flashing Beacon) are designed to alert motorists to the presence of a pedestrian entering the crosswalk.

(10) Crosswalks & Audible Tone Pedestrian Indicator
These types of pedestrian indicators improve the ability of pedestrians with visual and hearing impairments to safely cross the street. Activated lights can often accompanied by verbal messages and/or vibro-tactile surfaces that further aid in making pedestrian signalization more effective and accessible, especially for the elderly and the disabled.

(11) ADA Ramp | Tactile Strips
ADA compliant curb ramps should be located at all side streets and major intersections. The edge of an ADA compliant curb ramp should be marked with a tactile warning device (also known as truncated domes) to alert people with visual impairments to changes in the pedestrian environment. Contrast between the raised tactile device and the surrounding infrastructure is important so that the change is readily evident to the pedestrian.

(12) Trash Receptacles
When an adequate number of receptacles are available in an environment that is not already dirty, individuals tend to choose to dispose of their waste more responsibly. Having a cleaner public space is vital to encouraging its use and appeal.

(13) Short Term Bike Racks
Short-term bicycle parking is meant to accommodate visitors, customers, and others expected to depart within two hours. It should have an approved standard rack, appropriate location and placement, and weather protection.

(14) Benches | Seating
Public benches and seating are vital to creating a more active, comfortable, and useable environment. This simple amenity allows people to rest, congregate, and to engage with others in the community, making it a key factor in establishing a stronger sense of place.

(15) Informational Kiosks
Informational signage and wayfinding relative to the greenway helps to increase the trail’s presence in the community and encourage its use by providing important directional and destination information. For visitors and residents alike, providing more information regarding the community of Pagedale and its place in the trail network will both physically and psychologically reinforce its connection to the larger St. Louis region.
TYPICAL BLOCK DETAIL

1. Free flowing lanes of travel.
2. Bike Lanes are located adjacent to on-street parking lanes.
3. Metered on-street parking lanes provide convenient street parking for commercial businesses.
4. Landscape / bioretention zones provide an area for rain gardens and trees (with grates), as well as areas for outdoor dining and waiting spaces.
5. The sidewalk zone provides a clear pathway for pedestrians to move through the street, as well as a slower retailing zone where pedestrians can stop and window shop.

TYPICAL CORNER DETAIL

1. Median refuge areas provide a very safe and comfortable waiting area.
2. Pedestrian crosswalks with textured materials assist with traffic calming.
3. Shared lanes for bicycles and cars.
4. Pedestrian ramps with tactile strips.
5. Rain gardens on the bumpouts can add visual appeal and provide further stormwater mitigation.
6. Metered on-street parking lanes provide convenient street parking for commercial businesses.
7. Textured materials in the intersections add to the beautification of the roadway and branding of the area.

TYPICAL INTERSECTION DETAIL (PAGE & FERGUSON)

1. Eastbound bicyclists are directed to the St. Vincent Greenway via intersection pavement markings. Vehicular cyclists who prefer to take the lane may do so by following the shared lane markings.
2. Bicycle and pedestrian pavement markings on the trail surface reduce conflicts by separating the operating spaces for each mode.
3. To reduce conflicts with right turning vehicles, westbound bicyclists are directed to use a two-stage turn queue box to cross to the Bike Lanes.
**THE FUTURE LAND USE PLAN**

As an important element of the project, the Future Land Use Plan highlights all of the recommended land uses which will support the creation of the Town Center for the Page Avenue Great Streets Initiative. The intent of the Future Land Use Plan is to focus a mixed-use area between Buckner Avenue and Kingsland Avenue that will provide the neighborhood with a variety of much needed neighborhood services including dining, retail, office, and entertainment opportunities. Some specific types of uses pointed out by the Community included: sit-down restaurants, coffee shops, sandwich shops, an ice cream parlor, clothing stores, a health clinic, a gym, drugstores, and entertainment such as a movie theater.

The Future Land Use Plan was coordinated with the Right-of-Way Plan to ensure that the streetscape design and recommended improvements will create a sense of arrival, provide traffic calming, and contribute to the place-making of the Town Center. In order to achieve this, it is recommended that the City of Pagedale and Beyond Housing conduct an open and transparent process to develop a form-based code for the core area of the Town Center. The information to the right should be the basis of this work.

### MIXED-USE DISTRICT

- **Land Uses:** Primary Retail*, Secondary Retail*, Office Uses, Neighborhood Service, Entertainment, Residential, Institutional, and Medical Uses.
- **Building Heights:** 2 Story (25') Minimum and 4 Story (50') Maximum.
- **Building Setbacks:** Zero (0') Lot line on Page Avenue; 5' - 10' on Side Streets.
- **Building Types:** Mixed-Use Office, Commercial, and Residential Buildings.
- **Lot Widths:** May Vary; Lots larger that 50' Wide should have Building Articulation.

### TRANSIT-ORIENTED RESIDENTIAL DISTRICT

- **Land Uses:** Residential and Neighborhood Service Uses*.
- **Building Heights:** 3 Story (40') Minimum.
- **Building Setbacks:** 5'-10' on Page Avenue.
- **Building Types:** Mixed-Use Residential Buildings, Townhouses, Rowhouses, Apartments, and Stacked Flats.
- **Lot Widths:** Narrow; 25'-35' Maximum.

### URBAN RESIDENTIAL DISTRICT

- **Land Uses:** Residential and Neighborhood Service Uses*.
- **Building Heights:** 2 Story (25') Minimum.
- **Building Setbacks:** 10'-20' on Page Avenue.
- **Building Types:** Mixed-Use Residential Buildings, Townhouses, Apartments, Stacked Flats, Duplexes, and Fourplexes.
- **Lot Depths:** Medium; 35'-50' Maximum.

*Denotes allowed on the “Ground Floor” only.

NOTE: Existing “A” Residence District and existing “C” Commercial District are defined in Chapter 405 of the Municipal Code of the City of Pagedale.
FORECASTED TRAFFIC CONDITIONS UNDER THE VISION PLAN

Baseline Traffic & Trip Generation Estimate
Based on the historical traffic volume data presented in the area-wide traffic analysis, traffic on Page Avenue within the study area is not expected to increase in the future, and may actually decrease if no redevelopment occurs. Given this forecast, the existing volumes presented earlier in this report would function as conservative future baseline conditions and thus serve as the baseline traffic volumes for this study. Once the baseline traffic conditions have been established, the impacts of the traffic generated by the proposed Vision Plan can be analyzed. The purpose of this forecasted scenario was to identify the impacts of the proposed land use and roadway changes, and determine the roadway and traffic control improvements that would be necessary to support the resulting traffic demands.

A primary step in this analysis was to forecast the amount of traffic that would be generated by the Vision Plan during the peak hours. At this time, specific characteristics of the proposed land uses have not been established because this project is still in the planning stage. In order to estimate trip generation as accurately as possible, it was assumed that the future land uses would have a 35% coverage rate; this coverage area would represent the footprint of the building and the total square footage used in the trip generation calculation derived from the footprint and the number of stories planned for each use in the Vision Plan.

For purposes of the trip generation calculations, it was assumed that the mixed-use district would have a total of four stories; retail would be provided on the first floor to allow street access and the remaining three floors would house either office or residential uses. Additional trips for the mixed-use district included as entertainment were estimated using ITE’s data for a movie theater. All residential districts were assumed to have three stories, minimum.

It is anticipated that not all of the trips generated by the Vision Plan will represent vehicular trips as many patrons will be able to walk, bike, or use transit to access the area. In addition, published studies show that patrons of multi-use developments often visit more than one use within the development on a single visit. As a result, a 20% reduction was applied to the estimate to account for other modes of transportation. The resulting traffic generation for the Vision Plan are summarized in the chart at the top of this page.
Directional Distribution
The traffic generated by the Vision Plan was assigned to the adjoining road system by evaluating existing traffic patterns and assessing the market area of the development. The resulting trip distribution of the site-generated trips would be as follows:

- To/from the west on Page Avenue: 30%
- To/from the east on Page Avenue: 30%
- To/from the north on Pennsylvania Avenue: 10%
- To/from the south on Pennsylvania Avenue: 10%
- To/from the north on Ferguson Avenue: 10%
- To/from the south on Ferguson Avenue: 10%

Based on these trip generation and distribution estimates, the site-generated traffic was assigned to the adjoining road system. The proposed Vision Plan would add a meaningful volume of traffic to key intersections within the core study area, though impacts to through traffic on Page Avenue would be relatively modest.

Forecasted Operating Conditions
Basically as shown to the right, all study intersections are expected to operate at acceptable levels of service during the morning and afternoon peak hours with the proposed lane reduction and full build out of the Vision Plan. All signalized intersections along the corridor would operate at LOS C or better during both peak hours, confirming that Page Avenue will provide sufficient capacity as a two- and three-lane facility, as proposed.

The majority of unsignalized intersections will operate favorably at LOS C or better, with the exception of those intersections east of Ferguson Avenue during the afternoon peak hour. Higher side-street delays east of Ferguson Avenue are due to the removal of the center turning lane, which would otherwise accommodate two-stage left-turn movements from the side street (turning into the center lane before merging into through traffic). The center turn lane would be removed in this area to provide a landscaped median and enhanced traffic calming. While the expected side-street delays are reported as LOS E or F, the side-street delay is typically less than one minute of delay per vehicle. This may be considered acceptable on minor side-streets during peak periods, particularly when cross-access to adjacent intersections is encouraged.
With the vision for Page Avenue established, implementation will be the yardstick by which the Community will measure the success of the Great Streets Initiative. When considering the challenges of a recovering economy and limited federal funding sources, it is important that there be many strategies in place that will not only focus on Page Avenue, but will provide for a holistic approach to addressing the broader needs of the Community. In essence, the revitalization of the neighborhood and the revitalization of the street are one in the same, and it is important to ensure that greater economic strategies being utilized are grounded in the physical design for the vision. This section of the report is purposed to elaborate on those overall economic strategies as well as to define a plan of phased implementation and partnerships for the full development of the Vision Plan.
An infusion of incentives and public/institutional money can be an effective strategy to catalyze a local economy (and is, in fact, a key recommendation of the plan for Page Avenue) but, generally, outside resources are sometimes scarce and uncertain. Tax credits are awarded on a competitive basis and federal grants are in increasingly short supply. Therefore, a long-term strategy is needed—an economic enhancement strategy—to help improve the local economy from within.
Business attraction is an important part of any economic development strategy, but an economic enhancement strategy, by necessity, identifies ways to empower a community to improve its own fortunes by fostering job creation and entrepreneurialism from the ground up. In doing so, the incomes of residents can be raised, making quality development along Page Avenue more economically viable and with less dependence on scarce public resources. In other words, an economic enhancement strategy seeks to make Pagedale more economically self-sufficient and less dependent on "outside money"—thus placing its residents and community leaders firmly in control to achieve their goals for their community.

Beyond Housing has taken a holistic approach toward improving the economy of Pagedale as part of its 24:1 Initiative. Efforts planned or underway include addressing schools, early childhood education, and community capacity building. All of these efforts relate to growing an economy. The purpose of an economic enhancement strategy is not to reiterate elements of that plan or to replace it. Rather, it complements it with specific initiatives targeting economic stabilization and growth, income growth, and job creation.

When asked “What type of places would you most like to do on Page Avenue?” community survey respondents said...

- 15.8% said I would like a Town Square (like Lafayette Square)
- 14.9% said I would like Recreational Parks (like Baerveldt Park)
- 20.2% said I would like Community Centers (like the YMCA)
- 11.4% said I would like Community Gardens (like Wayside)
- 6.1% said I would like Public Buildings (like City Hall)
- 20.6% said I would like Cultural Amenities (like Pinkhouse)
When asked “Please tell us one word that should describe Page Avenue tomorrow?” community survey respondents said...

..... Better / Improving

..... Welcoming / Appealing / Inviting

..... Great / Excellent

..... New / Modern / Upgraded

..... Beautiful

..... Vibrant

Placemaking: The interrelationship between Housing and Economic Development

With a declining population and ever-more limited federal resources to address housing and community development-related issues, a series of recommendations were made, aimed at targeting changing demographics and community preferences by investing finite resources in the areas where investments can have an outsized impact in transforming economies and housing conditions. These include main streets, historic districts, town centers, and areas near transit stations. The plan for Page Avenue, along with efforts by Beyond Housing, could present a model of economic and physical transformation for other North County communities to follow.

The effects of placemaking can be profound on real estate. Studies have shown that where the place is inviting (and often open-air), shoppers stay longer and spend more. Anchors are particularly important for retailers, so developing those elements that draw people in—a grocery store (already in place), meaningful public space, and a cinema and other leisure attractions—is essential. In this way, the plan for Page can bolster the economic performance of Page by creating a central gathering place such as a civic greenspace or plaza, slowing down traffic, and making a more inviting pedestrian realm with buildings oriented toward people rather than cars.
As a housing and employment strategy, the development of an appealing town center or main street with attractive public space, retail, services, and entertainment is a catalyst that improves property values and increases the desirability of an entire area or community as a place to live and do business. A place-based approach can help improve the trajectory of property appreciation for homeowners in Pagedale—and their economic outlook—in very measurable ways, including home equity and net worth, and, by extension, their ability to maintain and improve their properties, finance education for their children, and start a business. More than simply creating a park or investing in street lamps, investments in a truly placed-based approach can help empower residents by making a community less dependent on public money.
Urban Agriculture

Urban agriculture has gotten a great deal of press recently as a community revitalization tool. In fact, it presents two opportunities: a catalyst for community empowerment and neighborhood stabilization, and a commercial enterprise. A study by Gateway Greening showed better rates of property appreciation, rent growth, occupancy, and homeownership—basic metrics indicating a neighborhood’s health—in the vicinity of its community gardens. This demonstrates that while community-based urban agriculture may not always directly stimulate the economy in the form of jobs and income, it can help stabilize a neighborhood by boosting marketability, desirability, and economic competitiveness.

In areas such as North St. Louis and North St. Louis County, an abundance of vacant land now coincides with demand for locally grown food. For-profit businesses such as Bright Farms, which is partnering with Schnuck’s to build a facility in the St. Louis region, as well as Garden Fresh Farms in St. Paul and FarmedHere in Chicago, have shown promising results as economically sustainable enterprises that could produce jobs and thus promote direct economic activity.

Urban agriculture can play two roles in the revitalization of Page Avenue specifically. First, they can serve as interim uses for land at the far edges of the corridor that are unlikely to be developed in the next five years. Second, the public market can be used to sell products grown in Pagedale, thus providing a direct link between Page Avenue and this effort aimed at neighborhood stabilization, job creation, and wellness.

Business Incubators

In addition to a business attraction strategy, there is also a need to allow startup and existing businesses to grow organically from within the community. As St. Louis continues to recover from the recession, more emphasis has been placed on innovation and entrepreneurship both regionally and nationally, and the public and private sector continue to form partnerships and develop programs to assist small businesses in their development and growth. Business incubators have been effective ways to allow startup and existing businesses to work in a collaborative environment, as well as receive educational, mentoring, and counseling services. They also provide access to broader networks and opportunities through which to grow and expand. The incubator space usually offers below-market rents so the business can focus more investment in product development, marketing, and expansion. The ultimate goal is that the business “graduates” from the space and ideally moves to a permanent space within the community. This way the businesses incubator functions as a catalyst for economic development in terms of local job growth, community wealth building, and real estate development.

In urban areas, establishing an incubator in an existing vacant or underutilized property is an effective way of putting these types of properties back to a productive use while also bringing new commercial activity to the area. Businesses incubators typically operate at a loss, so subsidies are required for initial startup costs, real estate, and operations, but depending on the size and success of the program, some incubators can break even from the rents paid by business tenants.
Retail-Oriented Incubators and Public Markets

Though many business incubator models are geared towards promoting IT-oriented businesses, there are also successful incubator models that focus on retail-oriented business in industries such as food production, restaurants, fashion, jewelry, home decorations and furnishings, or any other industries that require physical design and production. There is a great opportunity on Page Avenue to provide assistance to these retail oriented startups that can then grow and expand their businesses locally. Many retail oriented incubators offer business assistance services, office and production space, as well as retail space for test marketing new product lines in a public setting. These retail spaces can be in the form of a storefront or even a public market or flea market. There could be an opportunity to leverage the namesake of Frison Market by relocating it to Page Avenue and allowing retail incubator “students” to sell their products with the hopes of eventually relocating to a permanent brick and mortar location. In addition to the incubator opportunity, having an active public market on Page Avenue would bring much needed commercial activity to the corridor that could then trigger additional retail activity.

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An economic development liaison could work directly with existing and new businesses on Page to make sure that Pagedale residents are getting the training needed to make them employable. Such efforts will ensure that a revitalized Page Avenue not only provides Pagedale residents an appealing place to shop and spend their free time, but jobs and a source of income.

Public-Private Partnerships

Because the road to economic enhancement and self-sufficiency is not financeable purely by the private sector, partnerships are necessary. Where interests are aligned by the public, private/business, non-profit, or institutional sectors, opportunities exist to improve Pagedale to a greater degree than would be possible if any one sector acts alone.

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The roles for the public sector are many, including facilitation and the development of infrastructure. Local economic development programs exist that allow a government to capture taxes generated by a corridor or commercial district and—rather than distribute those revenues throughout the community—focus them on the specific area generating those revenues, concentrating funds in an area likely to generate economic growth for a broader area. Other programs, such as tax credits, can be utilized to bridge financial “gaps” necessary to complement private funding and realize a community’s aspirations for a project or district.
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IMPLEMENTATION: PHASE 1.0
NEAR TERM: 1-3 YEARS

Narrative of the Strategy
The basic strategy for Phase 1.0 of the Great Streets Initiative is four (4) fold. The goal of this phase is to first connect the new vibrancy of the Save-a-Lot and the Rosie Shields Senior Living Facility with a new streetscape to the west and a new greenway to the east, and second, to form the core of the Town Center from Buckner Avenue to Kingsland Avenue while new developments are being completed at the intersection of Page Avenue and Ferguson Boulevard.

Steps of the Strategy
Step 1: City of Pagedale to proceed with Phase II Page Avenue Streetscape Improvements provided for in the St. Louis Transportation Improvement Program by the East-West Gateway Council of Governments for fiscal years 2014 to 2017. Establish specific project area for these improvements on the south side of the street from Pennsylvania Avenue to Buckner Avenue.
Cost for Improvements: Approximately 600K.

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Cost for Improvements: T.B.D.

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Cost for Improvements: Not Included

Step 4: Beyond Housing & City of Pagedale to work closely with the East-West Gateway Council of Governments to seek local, state, or federal funding for the Town Center Streetscape between Buckner Avenue and Kingsland Avenue (south), and prioritization in the Transportation Improvement Program for FY 2014 - 2017*.
Cost for Improvements: Approximately $9.06M

*See Review of the Plan with Respect to the Transportation Program in the appendices of this report for eligibility & evaluation.

Cost of Phase: $9.66M
The following is a brief breakdown of the costs for this phase of the streetscape work.

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Spaces &amp; Amenities:</td>
<td>0.45 M</td>
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<tr>
<td>Roadway &amp; Street Improvements:</td>
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<td>Utilities Work / Relocations*:</td>
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<td>Bus &amp; Bicycle Improvements:</td>
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<td>Sidewalk Improvements:</td>
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<td>SUBTOTAL:</td>
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<tr>
<td>Design Fees (15% of Subtotal)</td>
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<tr>
<td>Contingency (20% of Subtotal + Design Fees)</td>
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</tr>
<tr>
<td>PHASE 1.0 TOTAL</td>
<td>9.66 M</td>
</tr>
</tbody>
</table>

*Utilities Work / Relocations indicates cost for both Phases 1.0 & Phase 2.0.
Implementation Partners

• The East-West Gateway Council of Governments
• Beyond Housing
• The City of Pagedale, Missouri
• The Great Rivers Greenway District
• The Missouri Department of Transportation
• St. Louis Department of Highway & Traffic
• St. Louis County Department of Planning
• METRO
• Metropolitan Sewer District
• Ameren UE
• NEFF Press

Funding Tools

• TIGER Grant Program
• MODESA (Tax Increment Financing)
• EPA Smart Growth Implementation Assistance Program
• Private Funding Sources

Recommended Roadway Implementation & Phasing

It is recommended that the transition from the existing five-lane to the proposed three-lane cross-section occur via lane drops/adds at the signalized intersections with Pennsylvania and Ogden Avenues. Specifically, the outside eastbound lane would drop as a right-turn-only at Pennsylvania, while a second westbound lane would be added at that location, as depicted at the top of this page. Similarly, the outside westbound lane would drop as a right-turn-only at Ogden Avenue. The existing right-turn lane at Ogden would be converted to a shoulder.

These limits for the three-lane cross-section are consistent with the traffic volumes on Page Avenue, and they provide an appropriate gateway into the primary Great Streets project area. While Pennsylvania coincides with the western limits of the core area, Ogden Avenue was chosen as the eastern limit to better accommodate the St. Vincent Greenway. The Greenway will intersect Page Avenue near Ogden and traverse the overpass between Ogden and Sutter Avenue, so it will be necessary to accommodate it within the existing cross-section on the bridge by reducing the number of vehicular lanes.

While the permanent infrastructure would be implemented in phases as noted above, it is recommended that the reduction to three lanes occur throughout the full study area between Pennsylvania and Ogden Avenues as part of Phase One of the plan. This would provide several benefits:

• It will result in a three-lane section of sufficient length to encourage driver compliance and to facilitate traffic calming. It also reduces the distance for pedestrians to cross Page Avenue, which is a significant existing need.
• It will provide an appropriate buffer and transition area for motorists entering from the west before they reach the core redevelopment area in Phase One and its pedestrian-scale environment.
• The St. Vincent Greenway will need to be added on the existing overpass between Sutter and Ogden Avenues as part of Phase One, and the reduction to three vehicular lanes in this section will provide sufficient space to add the trail and a protective barrier on the bridge.

As noted previously, it is not feasible to build the full infrastructure of the plan initially. Instead, it is recommended that the lane reductions outside of the Phase One project area be accomplished at a low cost initially via re-stripping and signage. Additionally, the use of large planters or other physical barriers to reinforce the lane reductions near the intersections should be considered. MoDOT staff has indicated that such features may be permissible under permit, provided the City agree to maintain them.
IMPLEMENTATION: PHASE 2.0
MEDIUM TERM: 3-7 YEARS

**Narrative of the Strategy**
The basic strategy for Phase 2.0 of the Great Streets Initiative is to focus on the eastern entryway into the new Town Center, as well as complete street improvements necessary to reconnect the Community to the Wellston Metrolink Station. If funding sources are secured in Step 4 of Phase 1.0, then Phase 2.0 should be completed at the same time as Phase 1.0.

**Step 1:** Beyond Housing & City of Pagedale to work closely with the East-West Gateway Council of Governments to seek local, state, or federal funding for the Eastern Entryway Streetscape between Sutter Avenue and Kingsland Avenue (north), and prioritization in the Transportation Improvement Program*.

*Cost for Improvements: Approximately $1.75M*

*See Review of the Plan with Respect to the Transportation Program in the appendices of this report for eligibility & evaluation.

**Step 2:** City of Pagedale to adopt form-based code completed in Step 3 of Phase 1.0 into the Municipal Code of the City of Pagedale.

*Cost for Improvements: Not Included*

**Step 3:** City of Pagedale to consider conducting an open process with the residents of Pagedale and the stakeholders of Gregan Place and Gruner Place (on south side of Page Avenue) and determine the feasibility and impacts of opening the gates at the south end of the street to pedestrian and vehicular circulation.

*Cost for Improvements: Not Included*

**Cost of Phase: $1.75M**
The following is a brief breakdown of the costs for this phase of the streetscape work.

<table>
<thead>
<tr>
<th>Basics:</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Spaces &amp; Amenities:</td>
<td>0.13 M</td>
</tr>
<tr>
<td>Roadway &amp; Street Improvements:</td>
<td>0.73 M</td>
</tr>
<tr>
<td>Utilities Work / Relocations*:</td>
<td>0.00 M</td>
</tr>
<tr>
<td>Bus &amp; Bicycle Improvements:</td>
<td>0.00 M</td>
</tr>
<tr>
<td>Sidewalk Improvements:</td>
<td>0.39 M</td>
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<td><strong>SUBTOTAL:</strong></td>
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<tr>
<td><strong>Design Fees (15% of Subtotal)</strong></td>
<td>0.20 M</td>
</tr>
<tr>
<td><strong>Contingency (20% of Subtotal + Design Fees)</strong></td>
<td>0.30 M</td>
</tr>
<tr>
<td><strong>PHASE 1.0 TOTAL</strong></td>
<td>1.75 M</td>
</tr>
</tbody>
</table>

*Utilities Work / Relocations costs are included in Phase 1.0.

**Implementation Partners**
- The East-West Gateway Council of Governments
- The City of Pagedale, Missouri
- The Missouri Department of Transportation
- ECO Recycling

**Funding Tools**
- TIGER Grant Program
- EPA Smart Growth Implementation Assistance Program
- Private Funding Sources
IMPLEMENTATION: PHASE 3.0
LONG TERM: 7-15 YEARS

Narrative of the Strategy
The basic strategy for Phase 3.0 of the Great Streets Initiative is to focus on the western entry-way into the new Town Center, as well reconfigure some connections into the neighborhood. If funding sources are secured in Step 4 of Phase 1.0, then Phase 3.0 should be completed at the same time as Phase 1.0.

Step 1: City of Pagedale to conduct a feasibility study to ascertain the feasibility of reconfiguring the intersections of Buckner Avenue and Leroy Avenue with Page Avenue into a singular intersection. 
Cost for Improvements: Not Included

Step 2: Beyond Housing & City of Pagedale to work closely with the East-West Gateway Council of Governments to seek local, state, or federal funding for the Western Entryway Streetscape between Sutter Avenue and Kingsland Avenue (north), and prioritization in the Transportation Improvement Program*.
Cost for Improvements: Approximately $2.73M

*See Review of the Plan with Respect to the Transportation Program in the appendices of this report for eligibility & evaluation.

Cost of Phase: $2.73M
The following is a brief breakdown of the costs for this phase of the streetscape work.

BASICS:
- Public Spaces & Amenities: 0.13 M
- Roadway & Street Improvements: 0.64 M
- Utilities Work / Relocations: 0.53 M
- Bus & Bicycle Improvements: 0.01 M
- Sidewalk Improvements: 0.67 M
SUBTOTAL: 1.98 M

Design Fees (15% of Subtotal) 0.30 M
Contingency (20% of Subtotal + Design Fees) 0.45 M

PHASE 1.0 TOTAL 2.73 M

Implementation Partners
- The East-West Gateway Council of Governments
- The City of Pagedale, Missouri
- The Missouri Department of Transportation
- METRO
- Metropolitan Sewer District
- Ameren UE
- Save-A-Lot

Funding Tools
- TIGER Grant Program
- EPA Smart Growth Implementation Assistance Program
- Private Funding Sources
With the vision for Page Avenue established, implementation will be the yardstick by which the Community will measure the success of the Great Streets Initiative. When considering the challenges of a recovering economy and limited federal funding sources, it is important that there be many strategies in place that will not only focus on Page Avenue, but will provide for a holistic approach to addressing the broader needs of the Community. In essence, the revitalization of the neighborhood and the revitalization of the street are one in the same, and it is important to ensure that greater economic strategies being utilized are grounded in the physical design for the vision. This section of the report is purposed to elaborate on those overall economic strategies as well as to define a plan of phased implementation and partnerships for the full development of the Vision Plan.
ECONOMIC ENHANCEMENT STRATEGY

Introduction
The economic challenges to realizing a transformation of Page into an attractive, walkable, and self-sustaining community include an unappealing, auto-oriented physical form, vacancy, and deteriorated buildings. Yet these problems are largely symptomatic of broader socio-economic challenges that residents of Pagedale face, including relatively low incomes, above average unemployment, poverty, and unequal access to education and jobs—to name a few. As a result, the underlying real estate economics are such that quality new development is dependent on subsidy—tax credits, grants, local incentives, etc.—because buying power is low, making achievable rents low for apartments and retail spaces and therefore creating little incentive for the private sector to act alone in improving Page Avenue.

An infusion of incentives and public/institutional money can be an effective strategy to catalyze a local economy (and is, in fact, a key recommendation of the plan for Page Avenue) but, generally, outside resources are sometimes scarce and uncertain. Tax credits are awarded on a competitive basis and federal grants are in increasingly short supply. Therefore, a long-term strategy is needed—an economic enhancement strategy—to help improve the local economy from within.

96% of attendees believe that there should be a high priority to “establish a long-term social, economic, and environmentally sustainable place.”

- Keypad Polling Results

PHOTOGRAPH OF EXISTING CONDITIONS ON PAGE AVENUE
Business attraction is an important part of any economic development strategy, but an economic enhancement strategy, by necessity, identifies ways to empower a community to improve its own fortunes by fostering job creation and entrepreneurialism from the ground up. In doing so, the incomes of residents can be raised, making quality development along Page Avenue more economically viable and with less dependence on scarce public resources. In other words, an economic enhancement strategy seeks to make Pagedale more economically self-sufficient and less dependent on “outside money”—thus placing its residents and community leaders firmly in control to achieve their goals for their community.

Beyond Housing has taken a holistic approach toward improving the economy of Pagedale as part of its 24:1 Initiative. Efforts planned or underway include addressing schools, early childhood education, and community capacity building. All of these efforts relate to growing an economy. The purpose of an economic enhancement strategy is not to reiterate elements of that plan or to replace it. Rather, it complements it with specific initiatives targeting economic stabilization and growth, income growth, and job creation.

When asked “What type of places would you most like to do on Page Avenue?” community survey respondents said...

- **15.8%** said I would like a Town Square (like Lafayette Square)
- **14.9%** said I would like Recreational Parks (like Baerveldt Park)
- **20.2%** said I would like Community Centers (like the YMCA)
- **11.4%** said I would like Community Gardens (like Wayside)
- **6.1%** said I would like Public Buildings (like City Hall)
- **20.6%** said I would like Cultural Amenities (like Pinkhouse)
Placemaking: The interrelationship between Housing and Economic Development

With a declining population and ever-more limited federal resources to address housing and community development-related issues, a series of recommendations were made, aimed at targeting changing demographics and community preferences by investing finite resources in the areas where investments can have an outsized impact in transforming economies and housing conditions. These include main streets, historic districts, town centers, and areas near transit stations. The plan for Page Avenue, along with efforts by Beyond Housing, could present a model of economic and physical transformation for other North County communities to follow.

The effects of placemaking can be profound on real estate. Studies have shown that where the place is inviting (and often open-air), shoppers stay longer and spend more. Anchors are particularly important for retailers, so developing those elements that draw people in—a grocery store (already in place), meaningful public space, and a cinema and other leisure attractions—is essential. In this way, the plan for Page can bolster the economic performance of Page by creating a central gathering place such as a civic greenspace or plaza, slowing down traffic, and making a more inviting pedestrian realm with buildings oriented toward people rather than cars.

When asked “Please tell us one word that should describe Page Avenue tomorrow?” community survey respondents said...

..... Better / Improving

..... Welcoming / Appealing / Inviting

..... Great / Excellent

..... New / Modern / Upgraded

..... Beautiful

..... Vibrant
As a housing and employment strategy, the development of an appealing town center or main street with attractive public space, retail, services, and entertainment is a catalyst that improves property values and increases the desirability of an entire area or community as a place to live and do business. A place-based approach can help improve the trajectory of property appreciation for homeowners in Pagedale—and their economic outlook—in very measurable ways, including home equity and net worth, and, by extension, their ability to maintain and improve their properties, finance education for their children, and start a business. More than simply creating a park or investing in street lamps, investments in a truly placed-based approach can help empower residents by making a community less dependent on public money.

81% of attendees believe that there should be a high priority to “establish a street that serves all types of transportation, including pedestrians.”

-Keypad Polling Results
Urban agriculture has gotten a great deal of press recently as a community revitalization tool. In fact, it presents two opportunities: a catalyst for community empowerment and neighborhood stabilization, and a commercial enterprise. A study by Gateway Greening showed better rates of property appreciation, rent growth, occupancy, and homeownership—basic metrics indicating a neighborhood’s health—in the vicinity of its community gardens. This demonstrates that while community-based urban agriculture may not always directly stimulate the economy in the form of jobs and income, it can help stabilize a neighborhood by boosting marketability, desirability, and economic competitiveness.

In areas such as North St. Louis and North St. Louis County, an abundance of vacant land now coincides with demand for locally grown food. For-profit businesses such as Bright Farms, which is partnering with Schnuck’s to build a facility in the St. Louis region, as well as Garden Fresh Farms in St. Paul and FarmedHere in Chicago, have shown promising results as economically sustainable enterprises that could produce jobs and thus promote direct economic activity.

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**NEAR TERM: 1-3 YEARS**

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**Step 4:** Beyond Housing & City of Pagedale to work closely with the East-West Gateway Council of Governments to seek local, state, or federal funding for the Town Center Streetscape between Buckner Avenue and Kingsland Avenue (south), and prioritization in the Transportation Improvement Program for FY 2014 - 2017.*
*Cost for Improvements: Approximately $9.06M*

*See Review of the Plan with Respect to the Transportation Program in the appendices of this report for eligibility & evaluation.

**Cost of Phase: $9.66M**
The following is a brief breakdown of the costs for this phase of the streetscape work.

<table>
<thead>
<tr>
<th>Basics</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Spaces &amp; Amenities</td>
<td>0.45 M</td>
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<tr>
<td>Roadway &amp; Street Improvements</td>
<td>2.32 M</td>
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<tr>
<td>Utilities Work / Relocations</td>
<td>1.90 M</td>
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<tr>
<td>Bus &amp; Bicycle Improvements</td>
<td>0.24 M</td>
</tr>
<tr>
<td>Sidewalk Improvements</td>
<td>2.09 M</td>
</tr>
<tr>
<td><strong>subtotal</strong></td>
<td><strong>7.00 M</strong></td>
</tr>
</tbody>
</table>

| Design Fees (15% of Subtotal) | 1.05 M |
| Contingency (20% of Subtotal + Design Fees) | 1.61 M |

**Phase 1.0 Total**

9.66 M

*Utilities Work / Relocations indicates cost for both Phases 1.0 & Phase 2.0.*
**Implementation Partners**

- The East-West Gateway Council of Governments
- Beyond Housing
- The City of Pagedale, Missouri
- The Great Rivers Greenway District
- The Missouri Department of Transportation
- St. Louis Department of Highway & Traffic
- St. Louis County Department of Planning
- METRO
- Metropolitan Sewer District
- Ameren UE
- NEFF Press

**Funding Tools**

- TIGER Grant Program
- MODESA (Tax Increment Financing)
- EPA Smart Growth Implementation Assistance Program
- Private Funding Sources

**Recommended Roadway Implementation & Phasing**

It is recommended that the transition from the existing five-lane to the proposed three-lane cross-section occur via lane drops/adds at the signalized intersections with Pennsylvania and Ogden Avenues. Specifically, the outside eastbound lane would drop as a right-turn-only at Pennsylvania, while a second westbound lane would be added at that location, as depicted at the top of this page. Similarly, the outside westbound lane would drop as a right-turn-only at Ogden Avenue. The existing right-turn lane at Ogden would be converted to a shoulder.

These limits for the three-lane cross-section are consistent with the traffic volumes on Page Avenue, and they provide an appropriate gateway into the primary Great Streets project area. While Pennsylvania coincides with the western limits of the core area, Ogden Avenue was chosen as the eastern limit to better accommodate the St. Vincent Greenway. The Greenway will intersect Page Avenue near Ogden and traverse the overpass between Ogden and Sutter Avenue, so it will be necessary to accommodate it within the existing cross-section on the bridge by reducing the number of vehicular lanes.

While the permanent infrastructure would be implemented in phases as noted above, it is recommended that the reduction to three lanes occur throughout the full study area between Pennsylvania and Ogden Avenues as part of Phase One of the plan. This would provide several benefits:

- It will result in a three-lane section of sufficient length to encourage driver compliance and to facilitate traffic calming. It also reduces the distance for pedestrians to cross Page Avenue, which is a significant existing need.
- It will provide an appropriate buffer and transition area for motorists entering from the west before they reach the core redevelopment area in Phase One and its pedestrian-scale environment.
- The St. Vincent Greenway will need to be added on the existing overpass between Sutter and Ogden Avenues as part of Phase One, and the reduction to three vehicular lanes in this section will provide sufficient space to add the trail and a protective barrier on the bridge.

As noted previously, it is not feasible to build the full infrastructure of the plan initially. Instead, it is recommended that the lane reductions outside of the Phase One project area be accomplished at a low cost initially via re-striping and signage. Additionally, the use of large planters or other physical barriers to reinforce the lane reductions near the intersections should be considered. MoDOT staff has indicated that such features may be permissible under permit, provided the City agree to maintain them.
IMPLEMENTATION: PHASE 2.0
MEDIUM TERM: 3-7 YEARS

Narrative of the Strategy
The basic strategy for Phase 2.0 of the Great Streets Initiative is to focus on the eastern entryway into the new Town Center, as well as complete street improvements necessary to reconnect the Community to the Wellston Metrolink Station. If funding sources are secured in Step 4 of Phase 1.0, then Phase 2.0 should be completed at the same time as Phase 1.0.

Step 1: Beyond Housing & City of Pagedale to work closely with the East-West Gateway Council of Governments to seek local, state, or federal funding for the Eastern Entryway Streetscape between Sutter Avenue and Kingsland Avenue (north), and prioritization in the Transportation Improvement Program*. Cost for Improvements: Approximately $1.75M

*See Review of the Plan with Respect to the Transportation Program in the appendices of this report for eligibility & evaluation.

Step 2: City of Pagedale to adopt form-based code completed in Step 3 of Phase 1.0 into the Municipal Code of the City of Pagedale. Cost for Improvements: Not Included

Step 3: City of Pagedale to consider conducting an open process with the residents of Pagedale and the stakeholders of Gregan Place and Gruner Place (on south side of Page Avenue) and determine the feasibility and impacts of opening the gates at the south end of the street to pedestrian and vehicular circulation. Cost for Improvements: Not Included

Cost of Phase: $1.75M
The following is a brief breakdown of the costs for this phase of the streetscape work.

BASICS:
Public Spaces & Amenities: 0.13 M
Roadway & Street Improvements: 0.73 M
Utilities Work / Relocations*: 0.00 M
Bus & Bicycle Improvements: 0.00 M
Sidewalk Improvements: 0.39 M
SUBTOTAL: 1.25 M

Design Fees (15% of Subtotal) 0.20 M
Contingency (20% of Subtotal + Design Fees) 0.30 M

PHASE 1.0 TOTAL 1.75 M

*Utilities Work / Relocations costs are included in Phase 1.0.

Implementation Partners
- The East-West Gateway Council of Governments
- The City of Pagedale, Missouri
- The Missouri Department of Transportation
- ECO Recycling

Funding Tools
- TIGER Grant Program
- EPA Smart Growth Implementation Assistance Program
- Private Funding Sources
IMPLEMENTATION: PHASE 3.0
LONG TERM: 7-15 YEARS

Narrative of the Strategy
The basic strategy for Phase 3.0 of the Great Streets Initiative is to focus on the western entryway into the new Town Center, as well reconfigure some connections into the neighborhood. If funding sources are secured in Step 4 of Phase 1.0, then Phase 3.0 should be completed at the same time as Phase 1.0.

Step 1: City of Pagedale to conduct a feasibility study to ascertain the feasibility of reconfiguring the intersections of Buckner Avenue and Leroy Avenue with Page Avenue into a singular intersection.
Cost for Improvements: Not Included

Step 2: Beyond Housing & City of Pagedale to work closely with the East-West Gateway Council of Governments to seek local, state, or federal funding for the Western Entryway Streetscape between Sutter Avenue and Kingsland Avenue (north), and prioritization in the Transportation Improvement Program*. Cost for Improvements: Approximately $2.73M

*See Review of the Plan with Respect to the Transportation Program in the appendices of this report for eligibility & evaluation.

Cost of Phase: $2.73M
The following is a brief breakdown of the costs for this phase of the streetscape work.

BASICS:
- Public Spaces & Amenities: 0.13 M
- Roadway & Street Improvements: 0.64 M
- Utilities Work / Relocations: 0.53 M
- Bus & Bicycle Improvements: 0.01 M
- Sidewalk Improvements: 0.67 M
SUBTOTAL: 1.98 M

Design Fees (15% of Subtotal) 0.30 M
Contingency (20% of Subtotal + Design Fees) 0.45 M

PHASE 1.0 TOTAL 2.73 M

Implementation Partners
- The East-West Gateway Council of Governments
- The City of Pagedale, Missouri
- The Missouri Department of Transportation
- METRO
- Metropolitan Sewer District
- Ameren UE
- Save-A-Lot

Funding Tools
- TIGER Grant Program
- EPA Smart Growth Implementation Assistance Program
- Private Funding Sources
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