THE BOULEVARD 2050 & TOMORROW
THE BOULEVARD 2050
& TOMORROW

PREPARED BY:
The City of Columbia Planning Department &
Town Planning & Urban Design Collaborative
ACKNOWLEDGEMENTS

CITY OF COLUMBIA MAYOR AND COUNCIL
Dean Dickey, Mayor
Wayne Kennedy, Vice Mayor
Carl McCullen, Ward 1
Debbie Matthews, Ward 2
Christa Martin, Ward 3
Mike Green, Ward 4
Susan Stephenson, Ward 5

CITY OF COLUMBIA PLANNING COMMISSION
Eddie Campbell, Chair
Dr. Eslisk Daniels, Vice Chair
Rose McClain, Secretary
Patrick Harlan
Charles Garner

COMMUNITY STAKEHOLDERS
Maury Regional Hospital
Columbia Housing and Redevelopment Corporation
The Maury Alliance
South Central Tennessee Workforce Alliance
Columbia State Community College

OFFICE OF THE CITY MANAGER

CITY OF COLUMBIA PLANNING DEPARTMENT

TOWN PLANNING AND URBAN DESIGN COLLABORATIVE LLC

AND HUNDREDS OF CITIZENS OF COLUMBIA
CONTENTS

THE SUSTAINABLE COMMUNITIES INITIATIVE ...... IX

INTRODUCTION ........................................................... XIII

PROCESS .......................................................................... 1

CONTEXT .......................................................................... 9

PRINCIPLES ...................................................................... 37

PLAN .................................................................................. 53

TOOLKIT ............................................................................ 85

STRATEGIES ........................................................................ 97
SUSTAINABLE COMMUNITIES INITIATIVE

On June 16th, 2009, the U.S. Department of Housing and Urban Development (HUD), U.S. Department of Transportation (DOT), and the U.S. Environmental Protection Agency (EPA) joined together to help communities nationwide improve access to affordable housing, increase transportation options, and lower transportation costs while protecting the environment.

The Partnership for Sustainable Communities works to coordinate federal housing, transportation, water, and other infrastructure investments to make neighborhoods more prosperous, allow people to live closer to jobs, save households time and money, and reduce pollution. The partnership agencies incorporate six principles of livability into federal funding programs, policies, and future legislative proposals.

6 Livability Principles:

1. Provide more transportation options.
2. Promote equitable, affordable housing.
3. Enhance economic competitiveness
4. Support existing communities
5. Coordinate and leverage federal policies and investment
6. Value communities and neighborhoods

In its first year, the Partnership for Sustainable Communities made strides toward its goals by targeting resources to help communities strengthen their economies by developing more sustainability, removing regulatory and policy barriers to make it easier for state and local governments to access federal resources, and aligning the agencies policies and priorities.

The City of Columbia is a fortunate participant in this vital effort. As one of only 62 cities in the nation to be included in the inaugural round of funding, Columbia has an opportunity to create a brighter, more sustainable future, specifically within the James Campbell Corridor.

For more information on The Partnership for Sustainable Communities, please visit www.sustainablecommunities.gov
| Process | Context | Principles | Plan | Toolkit | Strategies |

**INTRODUCTION**

*James M. Campbell surveying a piece of property*
INTRODUCTION

COLUMBIA IS POISED FOR TRANSFORMATIVE CHANGE. DECISIONS MADE NOW HAVE THE POTENTIAL TO GENERATE POSITIVE IMPACTS FOR GENERATIONS TO COME.

The City of Columbia is at a crossroads. As the economic and social center of the 13-County region of South Central Tennessee, it is a City with a long history of growth and change. From its iconic downtown to its medical services hub at Maury Regional Hospital, the City is continuously defined as the destination for so many critical needs. Employment, healthcare, commerce, professional services, recreation, and strong neighborhoods are some of the many assets the City of Columbia offers the region. Put simply, it is a very important place.

Yet, despite its prominence, the past decade has brought significant challenges. More than 36,000 people call this City home but the number of new residents has steadily declined. Growth is at an all-time low. In fact, by the latest measure of the 2010 U.S. Census, Columbia has suffered the third slowest growth rate in the entire state. In 2000, it was the 15th largest city in Tennessee. Today, it ranks 18th. Three other cities, all in Middle Tennessee, have taken its place. Several more cities are poised to do the same in a few short years. The clearest example of this trend is found in the closest place--the neighboring city of Spring Hill. For more than eight years, this town has been the fastest growing in Tennessee. The rapid growth has changed the one-time village of 3,000 people to a burgeoning community of 29,000. Many new families have moved to the area, bringing the subsequent investments and economic growth that comes with them. These families, businesses, and new success has shown Columbia much of what it has failed to capture. Many of the families and neighborhoods that have moved to Spring Hill, and other such cities, could have chosen Columbia but didn’t.

Today, the USDA classifies Columbia as an economically-distressed micro-urban area. Factors that have caused this condition are as follows: the City has the highest unemployment of any city its size in Tennessee; one in every five of its households lives below the poverty line; incomes are 16% below the State average; two of the three major employment industries (manufacturing and retail) are in decline; and finally, the City has lost 980 individuals in the 35-45 age bracket since 2000, leaving it with less qualified, marketable individuals in the labor force. These same individuals, ages 35-45, are also the largest growing sector of adults in the other cities that have surpassed Columbia.

In other words, the City has not only failed to attract new families, it has also failed to retain some of its most important, productive residents that once made this place their home. The factors that create the challenges Columbia faces today are likewise the factors that created its prosperity in the past. It is all a matter of livability.
JAMES CAMPBELL BOULEVARD STRATEGIC CORRIDOR PLAN

CHARRETTE TEAM MEMBERS DISCUSSING THE PROJECT WITH MEETINGS TAKING PLACE IN THE BACK OF THE STUDIO
THE RIGHT QUESTIONS LEAD TO THE RIGHT ANSWERS.

"question" noun
A MATTER FOR INVESTIGATION.
HOW THE PLAN WAS MADE

A successful plan is an embodiment of its community, a reflection of its values and desires for the future. Though professionals from various fields of expertise take part in efforts like these, their goals and objectives are first established by the City’s residents. This is done in a variety of ways. For The Boulevard 2050 & Tomorrow, the methods applied were unique in their scope and innovative in their practice. They are outlined below.

STAKEHOLDER INTERVIEWS

The first step in the process involved a series of lengthy interviews with community stakeholders. Members of the City Council, County Commission, and directors of important community institutions such as the Columbia Redevelopment Corporation, Maury Alliance, and Maury Regional Hospital all participated. Each interview was an opportunity for these important leaders to take a moment and think critically about the role that James Campbell Boulevard plays in maintaining the City’s livelihood. In every conversation, this group of people confirmed that the Boulevard was crucial to Columbia’s success.

This led to discussion on how successful the Boulevard is in today’s environment. The overwhelming majority of stakeholders said the Boulevard was underperforming, that there was much room for improvement. In their perspective, there are many problems facing the area. Several specific issues were explicitly detailed from their own experiences. For example, many said the roads function poorly, the stores cannot compete with those in other commercial areas, the appearance of the corridor—in its entirety—is unattractive, and that the area has no identity that is true to Columbia’s real character. These are but a few of the concerns mentioned. In every conversation, each individual claimed that major interventions must occur for the Boulevard to survive. The corridor had been built a certain way for more than 30 years, and stakeholders agreed that this manner of planning and building must drastically improve.
The findings from these interviews gave the team important insights on how the Boulevard impacts the efforts of all City leaders. Every day, these leaders work to improve the City in every possible way so that citizens can enjoy a better quality of life. Yet, the corridor exists as an obstacle to their efforts, something that must be tolerated rather than celebrated, ignored rather than utilized. With these findings in-hand, the team began its campaign to speak with citizens directly and hear how the Boulevard affects their own quality of life. This campaign was multifaceted, involving social technology, multimedia advertising, community surveys, and several public meetings and events held from June to August. Much like the Stakeholder Interviews, these meetings were essentially an extended conversation with all interested parties, a chance for the team to understand the community’s concerns and desires. The same questions asked to the stakeholders were asked to them. And their answers were surprisingly similar.

The first event was the “Community Kick-Off”. The event was styled as a traditional, open civic forum and held at one of the most important sites within the Boulevard, a shopping center known as Columbia Mall. This regional shopping mall has held a significant presence in the corridor for decades but significant decline in recent years have made it a source of frequent complaint. At the event, more than sixty residents attended stated their desire to see this very property transformed. Along with other requests involving traffic, lack of businesses, and poor options for entertainment, their advice formed a simple, clear conclusion: much like the stakeholders, they viewed the Boulevard as an important part of Columbia and a place that needed significant change in order to survive.
SURVEYS AND OTHER MEETINGS

From this initial “Kick-Off” meeting, the team solicited further input by holding eight more meetings with the community. Some meetings were held with civic clubs, such as the local Rotary and Kiwanis chapters. Other meetings were held as part of official business with the City Council, formal public meetings where important analysis could be shown and discussed with both officials and citizens. In every meeting, the same questions were asked to an ever-growing audience and the same answers were given. This also true for those who could not attend a meeting. Many individuals shared their thoughts through a formal opinion survey. Time and again, responses showed that the community viewed the Boulevard as unlivable and unsustainable. And the most common issues and concerns formed the core definition of the problems at-hand, problems that are highlighted in the next chapter. Acknowledging these common problems and defining each was a major success. It gave the team a better understanding of why the corridor was in decline. But from this knowledge, the most difficult question remained: knowing the Boulevard must change, what sort of change should occur? What sort of improvements should be made? To answer these questions, the team held a six day “charrette”, the centerpiece of the public involvement campaign.

FARMER’S MARKET BOOTH

TPUDC and the City of Columbia set up a booth at the Farmer’s Market in order to distribute surveys, share information and answer questions from the community. Free baked goods and cold water helped draw a crowd.

YOUNG PROFESSIONALS MEETING

Due to the fact that the City of Columbia has lack of young professionals we had a special meeting for that segment of the population. The goal was to introduce the project to them and hear what their concerns and interests were in regard to The Boulevard.
THE BOULEVARD 2050 & TOMORROW CHARRETTE

In general terms, a charrette is an intense design workshop that involves all members of the community. These workshops typically range from five to ten days, depending on the scale of the study. For Columbia, the event lasted six days. During this time, the team held a series of structured meetings to further pinpoint the exact location of traffic conflicts, property neglect, wasted space, and unfulfilled potential. Along with all participants who had been involved to this point, the team also solicited technical input from City engineers, public works professionals, building inspectors, public safety officials, and utility providers. Between, during, and after these meetings, the team designed the initial solutions and tested the initial ideas through model-building, quantitative analysis, scenario schemes, and other techniques.

It should be noted that all this effort took place on the actual corridor itself in one of the many vacant retail spaces at the east end of the study area. This space was essentially modified to become an active, working studio. And though the structured meetings were held to solicit input, the studio maintained an “open door” policy throughout so that members of the community could stop in and participate at any time. Indeed, visitors came by at all hours of the day to check on the progress.

As ideas were tested, the community examined the results and gave their honest impressions. Many sketches were tossed; many drafts and revisions were made. But when a final product was delivered, the community embraced it. That final product forms the heart of this plan as a distillation of the community’s aspirations, a formation of key ideas that, when applied to the Boulevard, create a visual blueprint for a better future.
WE NEED YOUR INPUT

Please join us for the next 5 months as the City and its consultant, Town Planning & Urban Design Collaborative LLC, work with the citizens of Columbia and merchants and land owners of the James Campbell Boulevard to envision and plan the future of the Corridor. James Campbell Boulevard is an important economic engine for the City but it is in distress and must be revitalized.

Design Charrette
AUG 3-9, 2011

What’s James Campbell?

Now That’s a Boulevard!

Postcard advertising the Charrette
CONTEXT

VIEW OF JAMES CAMPBELL BOULEVARD FACING EAST
THE NATURE OF A PROBLEM IS THE DEGREE OF ITS IMPACT.

“de-gree” *noun*  
A STAGE IN A SCALE OF INTENSITY OR AMOUNT.

ANALYSIS OF THE CORRIDOR

Before showcasing the plan itself, it is important to define the problems more clearly. As the community shared its concerns with the team through the meetings, surveys, and charrette, the team conducted detailed analysis to gain a stronger technical understanding of the nature of each problem. Through this research, it was often discovered that many of the problems the community faced were much more advanced than expected. By defining the degree of severity, the team gained an understanding in how best to design a solution.
STUDY AREA DESCRIPTION

This is James Campbell Boulevard. Or, at least, the most important section of the study area. The primary corridor extends from its intersection with Carmack Boulevard to the east to Trotwood Avenue to the west. This segment experiences the highest traffic volume, serves the most destinations, and encompasses the most critical intersections within the overall network. Outside this segment, the study area also involves the corridor from Trotwood Avenue to Industrial Park Road, though that particular section does not possess as many concerns.
JAMES CAMPBELL BOULEVARD STRATEGIC CORRIDOR PLAN

Context

Process

Principles

Plan

Toolkit

Strategies
ISSUE ONE: WASTED SPACE FOR DEVELOPMENT

According to the community and industry stakeholders, the corridor is currently populated with a variety of developments that are outdated and no longer attractive to visitors and residents alike. Some of this can be addressed by renovating existing structures. However, the most immediate and likely benefit is to look at the existing land for any underutilized space.

Measuring the lot coverage of every parcel shows that the majority of developed properties use only 30% or less of the available land for actual buildings. This means that while there are few vacant greenfield properties available for development, there is a great deal of space that can be used within existing development sites.

It is important to note that the majority of unused space is comprised of parking lots. These parking lots were built at a scale and size that was first dictated by the zoning ordinance. Thus, current regulations encourage the existing condition. These regulations intended to create an environment that would be low density, meaning that there would be few buildings along the corridor. This sort of pattern is appropriate in rural areas but not along James Campbell Boulevard. Because this land is so valuable to the commercial market, the demand for additional space is high. This demand can be met by utilizing more of the existing “grayfield” spaces.

In other words, to ensure an optimum use of the limited amount of land, lot coverages should be at least 60% throughout. That means that more than half the existing land is underutilized. Opening these spaces to new development will address the community desire for greater variety and investment.
CITY OF COLUMBIA, TENNESSEE

Process  Context  Principles  Plan  Toolkit  Strategies
Both City officials and residents recognize that the corridor experiences high amounts of flash flooding during storm events. Likewise, residents have stated the corridor has very little landscaping or “greenery”. These two issues contribute to the same core problem: James Campbell Boulevard has too much impervious surface.

As shown in the lot coverage analysis, a majority of developments possess underutilized space—mostly in the form of parking lots. These parking lots are constructed with asphalt, an impervious surface, which force rainwater to be diverted into stormwater facilities such as ditches, culverts, and pipes. In natural settings, rainwater is absorbed by soils and thus doesn’t require such infrastructure. As asphalt and other such surfaces expand to cover more land, so too must the necessary stormwater facilities expand to manage the increase in diverted water.

However, a recent history of flash floods indicates that existing stormwater infrastructure does not have the capacity to mitigate the rainfall running from the ever-expanding impervious surface. Two actions must be taken to improve this condition: infrastructure must be expanded or modified and more natural “softscapes” or “greenery” should be considered. Any additional landscaping could have the twofold benefit of absorbing stormwater and enhancing the appearance of the corridor.

As it stands now, City officials and residents are both correct in their assessments. Approximately 80% of the corridor is paved or covered by building footprints. This level of impervious surface requires critical features to maintain a safe, attractive environment—features that the current condition lacks.
<table>
<thead>
<tr>
<th>Process</th>
<th>Context</th>
<th>Principles</th>
<th>Plan</th>
<th>Toolkit</th>
<th>Strategies</th>
</tr>
</thead>
</table>

CITY OF COLUMBIA, TENNESSEE

![Map Image]
ISSUE THREE: SEPARATION OF USES AND LACK OF VARIETY

The preceding analysis shows there is a great deal of space that is underutilized in the corridor. Likewise, independent market analysis conducted for the project has shown there is a high demand for new uses outside the traditional retail/restaurant development dominating the corridor today. Additionally, residents and stakeholders have indicated a desire to see a broader variety of options. Altogether, these findings point to a need for a more urban environment that provides for all needs and activities on a 24-hour, around-the-clock environment. However, for this potential to be realized, drastic changes must occur to the existing land use pattern.

The land use pattern today is very much segregated. Virtually all properties in the corridor are single-use developments, meaning that only one type of tenant occupies each building. This single-use pattern negates many possible options for new investment and functionality. Under this condition, the corridor operates almost solely as a retail district and is thus vulnerable to decline when retail is in low demand. To reduce this vulnerability, new uses should be considered, especially in vacant spaces such as the shopping mall and other empty stores. These spaces currently have few options outside of retail due to zoning restrictions. If these restrictions were eased and new uses were allowed, the properties could be better marketed for offices or even housing.

The option for residential use is particularly important. An increased presence of residential development could bring new vitality to the corridor by giving more people immediate, convenient access to the shops and workplaces that already exist. This new approach of mixed-use development could be implemented on a variety of scales.
CITY OF COLUMBIA, TENNESSEE
Beyond land use and development patterns, the transportation network shows many concerns of its own. The community has stated a need for “better roads”, claiming that the current thoroughfares do not adequately manage the traffic. This complaint was frequently heard during the community meetings.

Analysis of the network, from Carmack Boulevard to the east and Trotwood Avenue to the west, shows there are three major arterials that combine to form the largest, highest concentration of traffic volumes within the city’s entire network. Several collector thoroughfares join this convergence, including Campbellsville Pike and Hatcher Lane. All such collectors, where identified, intersect James Campbell Boulevard to create critical stress points. Between these two basic classes of thoroughfares, the local street network is moderately ingrained in a grid pattern.

Though there are hundreds of miles of thoroughfares within this small network, traffic is almost completely restricted or diverted to the three major highways. This is the very definition of congestion, when traffic funnels to a few roads and push them beyond their most effective capacity.

To ease this congestion, future users should be given new options for travel. The network should be better designed to support more alternate routes. When each street is fully utilized, the existing network is more than capable to handle traffic.
The health of a street network is measured by the number of streets that connect within it. An optimum street network provides several routes to all destinations, essentially forming itself in a "grid" pattern. Such grid street networks are found in the oldest parts of Columbia. Within these grids, all streets have multiple parallel and perpendicular routes. If one road is closed or congested, a second road is very close by and easily accessed as an effective detour to a destination.

Along James Campbell Boulevard, there is some semblance of this proper street network in certain neighborhoods north of the highways. However, the majority of critical destinations (such as major retail stores) have only one or two possible access points. This causes the existing network to suffer the problems described by the congested traffic volumes in Issue Four.

It also extends trip lengths to unnecessary degrees. A primary example is found between Lawrence Street and Brookemeade Drive. Here, a street once provided a seamless link between Hatcher Lane and James Campbell Boulevard. Now, however, the connection is closed. The closure limits the access to critical destinations like Wal-mart and other retail tenants, as well as surrounding neighborhoods, which in turn forces travelers to use only one access point from James Campbell Boulevard. One access point to the busiest store in Columbia is a recipe for congestion, prolonged trips, and frustration.

In all instances, the presence of a missing connection is an obstacle towards achieving an optimum street network. All such points indicate not only areas of increased congestion, but also reduced development potential and decreased capacity for more travelers.
Crashes at Intersection of James Campbell & Trotwood

Crashes at Intersection of James Campbell & Carmack
ISSUE SIX: UNSAFE TRAVEL

The corridor currently functions as a high-speed, high volume thoroughfare. But high speeds and high volumes do not make a very safe combination. As a result, data reported from the Columbia Police Department shows a minimum of 217 traffic accidents in 2010, or four collisions every week. The majority of accidents occur when volumes are at their highest, typically from 3:00 – 6:00 PM. 60% of these accidents can be characterized as rear end collisions that are sometimes the result of the corridor’s design. Many of the accidents are also clustered around existing intersections with the largest cluster located at Trotwood and James Campbell, where 27 accidents occurred over 12 months. In all instances, the data and analysis shows again that the high volume of traffic coupled with the high-speed design of the road creates a core conflict. Other factors play a part, and solutions can be provided, but the data makes it clear that traffic is currently very unsafe within the Boulevard.

1. Trotwood and JCB, 27 accidents
2. Hatcher Lane and JCB, 10 accidents
3. Union Place and JCB, 10 accidents
4. Shadybrook Street and JCB, 4 accidents
5. Mall Entrance and JCB, 15 accidents
6. Brookemeade Drive and JCB, 9 accidents
7. Pillow Drive and JCB, 6 accidents
8. Campbellsville Pike and JCB, 13 accidents
9. Highway 31 and JCB, 26 accidents
Character, or the lack thereof, has been the most common concern expressed by residents and stakeholders. Throughout every meeting, members of the community would describe the corridor as “ugly”, “generic”, “outdated”, and “unattractive”. And while matters of style are often subjective, the underlying truth of these complaints is that James Campbell Boulevard, as built today, doesn’t reflect the best qualities of the City.

Virtually all members of the community agree that the downtown district and historic neighborhoods represent the best, most loved places in Columbia. These places create the positive identity and unique experience that instill pride amongst residents. These are places that everyone embraces and protects.

This is not the case, however, along James Campbell Boulevard. Though the corridor itself has a rich history and many attractive natural features, such as Goshen Hill, the development itself does not emulate the history or landscape. The development draws no tie to anything that has come beforehand or surrounds it today. The lack of these qualities has left the corridor much maligned. The community has stated there is no identity and nothing that inspires pride. Some stakeholders claim that when they bring visitors to Columbia, they often visit the downtown and nearby neighborhoods yet intentionally avoid the corridor for fear it would give visitors a bad impression.

The importance of character is very much evident when the Boulevard is compared to newer, more refined commercial districts such as Cool Springs and the Highway 31 corridor. When viewed against these places, James Campbell Boulevard can be easily disregarded by consumers as a relic of prior times and styles. However, given the manner in which these newer, more popular places have been built, it is highly likely that they, too, will be disregarded in the same way once the next newer, “flashier” commercial district is constructed elsewhere.
This leads to the most critical aspect of design as it relates to community character: over the broad history of city development, fundamental patterns have naturally established themselves to show how places can be successfully built. These fundamental patterns are even capable of enduring the public’s ever-changing sense of style. It is no coincidence that the oldest parts of Columbia are also the most attractive and welcoming. The downtown, for example, possesses a true “sense of place” to those who experience it. This is because the downtown has been built and maintained in a manner that respects the natural, fundamental rules of sustainable development. These rules will be more clearly illustrated in the next chapter, called “Principles”. For now, it is important to clearly define the differences between this ideal environment and what has occurred along the corridor.

The images provided on this page show a plain, evident difference between the most-loved places in Columbia and the development along the corridor. For the corridor to succeed in the future, it must emulate the characteristics of these most-loved places. Doing so would allow the corridor to embrace Columbia’s most unique, endearing qualities instead of mimicking the current styles seen in other places, styles that may be viewed later as being outdated themselves or simply out-of-place to Columbia’s vernacular.

This approach may seem unusual to some but the community has made it clear that they do not embrace the current character and appearance of James Campbell Boulevard. And they have also made it clear that they do not wish to be “another Cool Springs”. The only way to avoid such replication is to define the City by its best characteristics, to pinpoint exactly what makes Columbia so different from these other places.
Rigorous analysis is necessary to define Columbia’s unique characteristics. It requires more than simply comparing two images and seeing the difference between the two. The differences themselves must be measured and dissected for clear, quantifiable distinctions.

Thus, the team addressed this matter by touring the study area and the surrounding region to thoroughly document the unique architectural vernacular of the many different types of development. Examples of these observations are documented in the subsequent pages as Synoptic Surveys. These Synoptic Surveys are arranged, based on character or “Transect Zones”, from the most rural to the most urban.

The Synoptic Survey is a useful tool typically used for environmental analysis to determine the defining characteristics of a natural habitat. For example, there are physical characteristics that separate a swamp from a forest. Similarly, there are clear definable differences from “suburban neighborhoods” and “urban districts”. The Synoptic Survey determines the metrics and features of each habitat in order to recommend the degree of protection and type of restoration it might require.

Within nature, each functioning habitat is a symbiotic community of micro-climate, minerals, humidity, flora and fauna. Within the built environment of a City, the functioning habitat is a symbiotic community of buildings, streets, open space, sidewalks, and more.

The Synoptic Survey identifies these physical characteristics so that the most desirable qualities may serve as inspiration or be replicated in future development patterns. The results of this analysis is provided here. Each numerical difference between what is found in the most-loved areas versus what is found in the corridor highlights the gaps or missing features that the corridor must provide in the future.
TRANSECT ZONE: T3 - SUB-URBAN

Average Block Dimension
- 700 ft X 480 ft

Average Units per Acre
- 3

Average Lot Size
- 75 ft X 250 ft

Average Lot Coverage
- 10-15%

Average Parked Cars per Acre
- 8

Average Trees per Acre
- 20

Public Frontage Type
- residential

Spatial Width
- 120 ft

Posted Design Speed
- 35 mph

R.O.W. Width
- 43 ft

Moving Lanes
- two way

Parking Lanes
- yield

Pavement Width
- 27 ft

Curb Type
- square, 6 in

Curb Radius
- 10 ft

Median
- none

Sidewalk
- 5 ft

Bike Way Type
- none

Bike Way Width
- none

Building Disposition
- edgeyard

Lot Width
- 70-80 ft

Lot Depth
- 250 ft

Lot Coverage
- 10%-15%

Buildout Percentage at Setback
- 60-70%

Front Setback
- 14 ft and 60 ft

Side Setback
- 10-20 ft

Rear Setback
- n/a

Outbuilding Setback
- 6 ft

Front Encroachment
- 10-12 ft

Side Encroachment
- 4 ft

Ground Level Function
- residential

Upper Level Function
- residential

Private Frontage Type
- porch

Principal Building Height
- 2.5 stories

Outbuilding Height
- 1 story

First floor above Grade
- 2-5 ft

Planter Type
- continuous

Planter Width
- 8 ft

Planting Pattern
- 34 - 54 ft o.c.

Tree Type
- triangle - pine, pruned deciduous

Principal Building Height
- 2.5 stories

Outbuilding Height
- 1 story

First floor above Grade
- 2-5 ft

Context

Process

Principles

Plan

Toolkit

Strategies
CITY OF COLUMBIA, TENNESSEE

Process

Context

Principles

Plan

Toolkit

Strategies

TRANSECT ZONE: T3 - SUB-URBAN

1. MAYES PLACE

- Average Block Dimension: 200 ft X 350 ft
- Average Units per Acre: 4
- Average Lot Size: 50 ft X 200 ft
- Average Lot Coverage: 15-20%
- Average Parking Cars per Acre: 10
- Average Trees per Acre: 20

2. PUBLIC FRONTAGE

- Public Frontage Type: residential boulevard
- Spatial Width: 38 ft
- Posted Design Speed: 25 mph
- R.O.W. Width: 46 ft
- Moving Lanes: two way, 16 ft
- Parking Lanes: unmarked parallel
- Pavement Width: 22 ft
- Curb Type: roll, 6 in
- Curb Radius: 10 ft
- Median: 6 ft
- Sidewalk: 5 ft
- Bike Way Type: none
- Bike Way Width: none

3. PRIVATE FRONTAGE

- Private Frontage Type: porch
- Principal Building Height: 2.5 stories
- Outbuilding Height: 1 story
- First floor above Grade: 2-5 ft
- Building Disposition: edgyard
- Lot Width: 34-70 ft
- Lot Depth: 200 ft
- Lot Coverage: 15%-20%
- Buildout Percentage at Setback: 60-70%
- Front Setback: 14 ft and 60 ft
- Side Setback: 10-20 ft
- Rear Setback: n/a
- Outbuilding Setback: 6 ft
- Front Encroachment: 10-12 ft
- Side Encroachment: 4 ft
- Ground Level Function: residential
- Upper Level Function: residential
TRANSECT ZONE: T4 - GENERAL URBAN

1. POLK HOME

- Average Block Dimension: 700 ft X 480 ft
- Average Units per Acre: 4
- Average Lot Size: 50 ft X 200 ft
- Average Lot Coverage: 10-15%
- Average Parked Cars per Acre: 10
- Average Trees per Acre: 10

Planter Type: continuous
- Planter Width: 20 ft
- Planting Pattern: 34 - 54 ft o.c.
- Tree Type: triangle - magnolia

2. PUBLIC FRONTAGE

- Public Frontage Type: arterial
- Spatial Width: 81 ft
- Posted Design Speed: 45 mph
- R.O.W. Width: 53 ft
- Moving Lanes: two way
- Parking Lanes: yield
- Pavement Width: 20 ft
- Curb Type: bulb-out
- Curb Radius: 10 ft
- Median: none
- Sidewalk: 9 ft
- Bike Way Type: none
- Bike Way Width: none

Building Disposition: edgeyard
- Lot Width: 34-70 ft
- Lot Depth: 200 ft
- Lot Coverage: 10-15%
- Buildout Percentage at Setback: 50-60%
- Front Setback: 13 ft
- Side Setback: 3-12 ft
- Rear Setback: 5-10 ft
- Outbuilding Setback: 6 ft
- Front Encroachment: 3 ft
- Side Encroachment: 4 ft
- Ground Level Function: civic/residential
- Upper Level Function: civic/residential

3. PRIVATE FRONTAGE

- Private Frontage Type: porch and stoop
- Principal Building Height: 2 stories
- Outbuilding Height: 1 story
- First floor above Grade: 1.5-2 ft
TRANSECT ZONE: T4 TO T5 TRANSITION

1. GARDEN & 7TH STREETS

<table>
<thead>
<tr>
<th>Average Block Dimension</th>
<th>50 ft x 250 ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Units per Acre</td>
<td>n/a</td>
</tr>
<tr>
<td>Average Lot Size</td>
<td>450 ft x 450 ft</td>
</tr>
<tr>
<td>Average Lot Coverage</td>
<td>10-15%</td>
</tr>
<tr>
<td>Average Parked Cars per Acre</td>
<td>30</td>
</tr>
<tr>
<td>Average Trees per Acre</td>
<td>10</td>
</tr>
</tbody>
</table>

2. PUBLIC FRONTAGE

<table>
<thead>
<tr>
<th>Public Frontage Type</th>
<th>yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial Width</td>
<td>94 ft</td>
</tr>
<tr>
<td>Posted Design Speed</td>
<td>35 mph</td>
</tr>
<tr>
<td>R.O.W. Width</td>
<td>46 ft</td>
</tr>
<tr>
<td>Moving Lanes</td>
<td>two way</td>
</tr>
<tr>
<td>Parking Lanes</td>
<td>angled - 14 ft</td>
</tr>
<tr>
<td>Pavement Width</td>
<td>20 ft</td>
</tr>
<tr>
<td>Curb Type</td>
<td>bulb - out</td>
</tr>
<tr>
<td>Curb Radius</td>
<td>10 ft</td>
</tr>
<tr>
<td>Median</td>
<td>none</td>
</tr>
<tr>
<td>Sidewalk</td>
<td>10 ft</td>
</tr>
<tr>
<td>Bike Way Type</td>
<td>none</td>
</tr>
<tr>
<td>Bike Way Width</td>
<td>none</td>
</tr>
</tbody>
</table>

3. PRIVATE FRONTAGE

<table>
<thead>
<tr>
<th>Private Frontage Type</th>
<th>porch and stoop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Building Height</td>
<td>2 stories</td>
</tr>
<tr>
<td>Outbuilding Height</td>
<td>1 story</td>
</tr>
<tr>
<td>First floor above Grade</td>
<td>1.5-2 ft</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building Disposition</th>
<th>edgeyard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot Width</td>
<td>34-70 ft</td>
</tr>
<tr>
<td>Lot Depth</td>
<td>200-320 ft</td>
</tr>
<tr>
<td>Lot Coverage</td>
<td>10-15%</td>
</tr>
<tr>
<td>Buildout Percentage at Setback</td>
<td>50-60%</td>
</tr>
<tr>
<td>Front Setback</td>
<td>13 ft</td>
</tr>
<tr>
<td>Side Setback</td>
<td>3-12 ft</td>
</tr>
<tr>
<td>Rear Setback</td>
<td>5-10 ft</td>
</tr>
<tr>
<td>Outbuilding Setback</td>
<td>6 ft</td>
</tr>
<tr>
<td>Front Encroachment</td>
<td>8 ft</td>
</tr>
<tr>
<td>Side Encroachment</td>
<td>4 ft</td>
</tr>
<tr>
<td>Ground Level Function</td>
<td>residential</td>
</tr>
<tr>
<td>Upper Level Function</td>
<td>residential</td>
</tr>
</tbody>
</table>
TRANSECT ZONE: T5 - URBAN CENTER

1. DOWNTOWN COLUMBIA

<table>
<thead>
<tr>
<th>Public Frontage Type</th>
<th>yield street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial Width</td>
<td>100 ft</td>
</tr>
<tr>
<td>Posted Design Speed</td>
<td>25 mph</td>
</tr>
<tr>
<td>R.O.W. Width</td>
<td>50 ft</td>
</tr>
<tr>
<td>Moving Lanes</td>
<td>two way, 20 ft</td>
</tr>
<tr>
<td>Parking Lanes</td>
<td>angled - 13 ft</td>
</tr>
<tr>
<td>Pavement Width</td>
<td>20 ft</td>
</tr>
<tr>
<td>Curb Type</td>
<td>bulb-out</td>
</tr>
<tr>
<td>Curb Radius</td>
<td>10 ft</td>
</tr>
<tr>
<td>Median</td>
<td>none</td>
</tr>
<tr>
<td>Sidewalk</td>
<td>12 ft</td>
</tr>
<tr>
<td>Bike Way Type</td>
<td>none</td>
</tr>
<tr>
<td>Bike Way Width</td>
<td>n/a</td>
</tr>
</tbody>
</table>

2. PUBLIC FRONTAGE

<table>
<thead>
<tr>
<th>Planter Type</th>
<th>tree well</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planter Width</td>
<td>5 ft</td>
</tr>
<tr>
<td>Planting Pattern</td>
<td>50 ft o.c.</td>
</tr>
<tr>
<td>Tree Type</td>
<td>intermediate, 30 ft canopy</td>
</tr>
</tbody>
</table>

3. PRIVATE FRONTAGE

<table>
<thead>
<tr>
<th>Private Frontage Type</th>
<th>storefront</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Building Height</td>
<td>3 stories</td>
</tr>
<tr>
<td>Outbuilding Height</td>
<td>1 story</td>
</tr>
<tr>
<td>First floor above Grade</td>
<td>1.5-2 ft</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building Disposition</th>
<th>no yard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot Width</td>
<td>34-70 ft</td>
</tr>
<tr>
<td>Lot Depth</td>
<td>200-320 ft</td>
</tr>
<tr>
<td>Lot Coverage</td>
<td>90%</td>
</tr>
<tr>
<td>Buildout Percentage at Setback</td>
<td>100%</td>
</tr>
<tr>
<td>Front Setback</td>
<td>0 ft</td>
</tr>
<tr>
<td>Side Setback</td>
<td>0 ft</td>
</tr>
<tr>
<td>Rear Setback</td>
<td>0 ft</td>
</tr>
<tr>
<td>Outbuilding Setback</td>
<td>0 ft</td>
</tr>
<tr>
<td>Front Encroachment</td>
<td>0 ft</td>
</tr>
<tr>
<td>Side Encroachment</td>
<td>0 ft</td>
</tr>
<tr>
<td>Ground Level Function</td>
<td>commercial</td>
</tr>
<tr>
<td>Upper Level Function</td>
<td>office/residential</td>
</tr>
</tbody>
</table>
TRANSECT ZONE: CONVENTIONAL CORRIDOR

### 1. James Campbell Blvd. (Car Dealership)

- **Planter Type**: continuous
- **Planter Width**: 8 ft
- **Planting Pattern**: 34-54 ft o.c.
- **Tree Type**: ball - locust, maple

### 2. Public Frontage

- **Average Block Length**: n/a
- **Average Units per Acre**: n/a
- **Average Lot Size**: 500 ft x 600 ft
- **Average Lot Coverage**: 5%
- **Average Parking Cars per Acre**: n/a (dealership)
- **Average Trees per Acre**: 0

- **Public Frontage Type**: boulevard
- **Spatial Width**: 300 ft
- **Posted Design Speed**: 45 mph
- **R.O.W. Width**: 120 ft
- **Moving Lanes**: two way
- **Parking Lanes**: none
- **Pavement Width**: 50 ft each side
- **Curb Type**: none
- **Curb Radius**: 40-50 ft
- **Median**: 20 ft
- **Sidewalk**: 12 ft
- **Bike Way Type**: none
- **Bike Way Width**: none

### 3. Private Frontage

- **Private Frontage Type**: stoop
- **Principal Building Height**: 1 story
- **Outbuilding Height**: 1 story
- **First floor above Grade**: 0 ft

- **Lot Width**: 520 ft
- **Lot Depth**: 800 ft
- **Lot Coverage**: 6%
- **Buildout Percentage at Setback**: 25%
- **Front Setback**: 310 ft
- **Side Setback**: 3-12 ft
- **Rear Setback**: 5-10 ft
- **Outbuilding Setback**: 6 ft
- **Front Encroachment**: n/a
- **Side Encroachment**: n/a
- **Ground Level Function**: commercial
- **Upper Level Function**: commercial
## Transect Zone: Conventional Corridor

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Block Dimension</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Average Units per Acre</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Average Lot Size</td>
<td>200 ft X 300 ft</td>
<td></td>
</tr>
<tr>
<td>Average Lot Coverage</td>
<td>15-20%</td>
<td></td>
</tr>
<tr>
<td>Average Parked Cars per Acre</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Average Trees per Acre</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### 1. James Campbell Blvd.

#### Boulevard

- **Plant Type**: continuous
- **Planter Width**: 8 ft
- **Planting Pattern**: 34-54 ft o.c.
- **Tree Type**: ball - locust, maple

### 2. Public Frontage

- **Public Frontage Type**: boulevard
- **Spatial Width**: 300 ft
- **Posted Design Speed**: 45 mph
- **R.O.W. Width**: 120 ft
- **Moving Lanes**: two way
- **Parking Lanes**: none
- **Pavement Width**: 50 ft each side
- **Curb Type**: none
- **Curb Radius**: 40-50 ft
- **Median**: 20 ft
- **Sidewalk**: 12 ft
- **Bike Way Type**: none
- **Bike Way Width**: none

### 3. Private Frontage

- **Private Frontage Type**: stoop
- **Principal Building Height**: 1 story
- **Outbuilding Height**: 1 story
- **First Floor above Grade**: 0 ft

### Building Disposition

- **Lot Width**: 300 ft
- **Lot Depth**: 200 ft
- **Lot Coverage**: 15-20%
- **Buildout Percentage at Setback**: 50-60%
- **Front Setback**: 66 ft
- **Side Setback**: 3-12 ft
- **Rear Setback**: 5-10 ft
- **Outbuilding Setback**: n/a
- **Front Encroachment**: n/a
- **Side Encroachment**: n/a
- **Ground Level Function**: commercial
- **Upper Level Function**: commercial
PRINCIPLES

A WALKABLE STREETSCAPE
THE BEST SOLUTIONS STEM FROM THE MOST PROVEN TRADITIONS.

“tra-di-tion” noun

A time-honored practice or set of practices.
At its core, this plan is built on the Livability Principles established by the Partnership for Sustainable Communities. It should be noted, though, that these principles are not new but instead are an extension of core practices that already exist in healthy, livable cities. This chapter will give delve further into the Livability Principles and provide specific components of those principles. This chapter will also show how the principles and components can address each defined problem area, which in turn leads directly to the plan itself.

The Livability Principles in further detail:

Provide more transportation choices.
Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.

Promote equitable, affordable housing.
Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

Enhance economic competitiveness.
Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.

Support existing communities.
Target federal funding toward existing communities—through strategies like transit-oriented, mixed-use development and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.

Coordinate and leverage federal policies and investment.
Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

Value communities and neighborhoods.
Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.
When applied, these principles make areas more livable, more vibrant, more people-oriented, and create pride in a community. The challenge is understanding how the application can occur. The principles alone cannot generate the necessary changes; they require an array of specific practices and approaches that have been tested and exemplified for their ability to deliver success. These practices and approaches, termed “components” for this plan, include walkability, connectivity, mixed use, housing diversity, and transportation alternatives, to name a few. Many of these components have already been discussed in the review of existing conditions. They will be further discussed in the following pages.
COMPONENTS OF THE LIVABILITY PRINCIPLES

WALKABILITY

To its credit, the term walkability has become a popular word in recent years, though it comes without much of a definition. As a result, it is often misunderstood to mean a place that would be pedestrian-only or anti-automobile. This is much too severe. The term does not represent propaganda against automobiles or suggest some either/or ultimatum. Instead, a “walkable” environment has a balance between many modes of transportation—including, but not limited to, the automobile and pedestrian. More importantly, it describes an environment in which people simply feel comfortable. The constituent elements of walkability are referred to as “the 3 D’s”: Distance, Destination, and Design.

Distance

The average pedestrian is willing to walk up to one-quarter of a mile (1320 feet) or roughly five minutes to a meaningful destination. This ¼ mile or five minute walk from the edge to a meaningful destination at the center is called a “pedestrian shed”. For travel distances requiring more than a five minute walk, most Americans will choose a car rather than walking. This walking vs. driving threshold is locally calibrated. It may be more expansive in areas with mild climates or cultures accustomed to walking due to higher fuel costs; it may also be constricted in areas with steep terrain or very hot, cold or rainy climates. The topography of the James Campbell Boulevard coupled with very hot summer weather requires the built environment to be of extremely high quality to encourage people to choose walking over driving.

Destination

Meaningful destinations may include a multitude of uses and activities. These include civic spaces such as parks, plazas, squares or greens, as well as schools, meeting halls or other civic institutions. They are used more frequently when residents have easier access to them on foot rather than in an automobile. In addition, meaningful destinations may include commercial areas like neighborhood or town centers where daily or weekly shopping needs can be met. When centrally located, these destinations often become the “heart” of the community. There are few parks or civic spaces along James Campbell Boulevard, but the Maury Regional Medical Center faces a green that serves as a gathering place for local workers and hospital visitors.
Design

In the design of walkable places, it is important to create a sense of enclosure and human scale by pulling buildings closer to the street and not allowing large expanses of asphalt to dominate the frontage of buildings. Buildings close to the street provide interest to those passing by. Additionally, the elements of these buildings are more visible and proximate, including porches, doors and windows that emphasize the human scale and the relationship of buildings to passersby. Buildings located closer to the street also create an important sense of safety for the pedestrian.

With the exception of very rural areas where automobile traffic is limited, wide sidewalks are critical for a walkable environment. Sidewalk widths vary in different parts of a city: from a five-foot minimum in rural and suburban areas to twenty-five feet in the most urban district. While certain areas of Columbia, like the downtown, have adequate sidewalks, they are lacking along James Campbell Boulevard. And because Walkability is crucial towards achieving Livability, sidewalks will be a critical part of the redevelopment of the corridor.

**COMPLETE STREETS**

Design is not only a critical element for sidewalks and walkability, it is also important for the entirety of a street. Simple observation clearly shows there is a lack of sidewalks, but other important features missing from the Corridor include street trees, bicycle lanes, safer intersections, and lane widths that support slower speeds. When combined, all these features can create what is known as a “complete street”, a healthy type of thoroughfare that James Campbell Boulevard is not.
The idea that James Campbell Boulevard is not complete is a new discovery, or rather, a new way of considering the Boulevard. Prior to now, the Boulevard was viewed as a highway by-pass, a means to drive around the City without actually entering it. But the decades of commercial development and rise of surrounding neighborhoods turned this former by-pass highway into the fully-functioning corridor it is today. In fact, it is clear that the highway now acts more like a city street. Much like all other city streets, there is a high amount of pedestrian and cyclist activity—despite adequate infrastructure. There is also a very high amount of stop-and-go traffic, the sort of congestion that is not intended for highway roads. In realizing the many existing and future functions that the Boulevard should support, it should again be stated that the design is currently “incomplete”.

Which again brings attention to the necessary features that are lacking, such as street trees, bike lanes, and proper intersection design. In regard to street trees, these are particularly needed along the sides of the thoroughfare, between the sidewalk and the street, to provide a necessary buffer between automobiles and pedestrians. Within this buffer, trees not only instill a “protected” feeling to pedestrians but also create visual appeal and dappled shade along the walkway—all of which is pleasant for the pedestrian. There are benefits for traffic, too. When street trees are planted in a consistent row along both edges of the street, their canopy provides a sense of enclosure within the street itself, creating a highly effective psychological impediment to speeding in automobiles. In other words, street trees can create a genuine sense that the Boulevard is not just a highway anymore, but a safe, well-kept local street designed for slower, more comfortable travel.
As street trees provide a sense of enclosure and comfort, cars travel slower and thus remove the necessity for wide travel lanes and broad intersections. The existing design of the Boulevard shows twelve-foot travel lanes, wide turning radii, and large intersections, all of which are standard for most highways due to the high-seed traffic that highways are expected to support. Yet, recognizing that the Boulevard is no longer used as a by-pass, and doesn’t function as a highway, the addition of street trees and the slowing of traffic leads to an opportunity to reduce the intensity of the aforementioned traffic.

To put it more clearly, the Boulevard currently uses travel lanes that are 12-feet wide. As traffic slows, these lanes can be reduced from 12 to 11 feet. This small adjustment may seem nominal but it has been proven to support slower, better managed traffic to a far better degree than any speed limit signs that may be posted. As it stands now, the existing design supports speeds that are much higher than those technically allowed, allowing cars to drive 70 mph or greater in relative comfort.

In similar fashion, narrowing travel lanes allows intersections to be redesigned to support additional features. As these lanes narrow, there is space left behind that can then be used for bicycle lanes, giving cyclists a much-needed space that is solely theirs. This captures the basic essence of a Complete Street. It is a street that is built of more than just asphalt. It is a street that provides a fair distribution of space to cars (that travel slower and safer), cyclists (who enjoy their own lane), street trees (that slow traffic and provide safety) and pedestrians (who utilize their very own sidewalk).
No one street exists alone. Each connects itself to another street, which then connects itself to two or three more, forming a network of travel routes. For this reason, it is important to view the immediate network of streets when viewing a corridor like James Campbell Boulevard. The Boulevard is not alone. All traffic coursing through it is attributed to, and impacted by, the surrounding network. For traffic to improve, the network should function at its highest possible level. This can be achieved in a very clear, proven way. It does not involve widening roads to support more traffic. Rather, research shows that the solution involves creating multiple streets to support multiple routes. Or rather, by connecting all roads to the highest possible degree.

This is achieved by two measures: first, it is critical to avoid and eliminate the existence of dead end streets. These dead ends prevent travellers from finding more direct routes to various destinations. It is also important to find areas where there are few streets and establish an interconnected network of thoroughfares (or grid). A grid street network benefits traffic by eliminating one-way routes and one-way entrances to destinations, which reduces the “funneling effect” that occurs when all traffic is diverted to just one road.

This is especially beneficial to emergency services since higher connectivity provides emergency services many routes to arrive at an emergency call. This is also beneficial to pedestrians, as a new network of streets provides an equal number of sidewalks, paths, and passages to make walking more convenient.
MIXED-USE

The best, most vibrant places are always found to have a broad mixture of uses, whether it’s the live/work unit next to a restaurant or the office building next to a courtyard and rowhouses. Such a variety of uses helps create a place that provides a wide range of choices and serves virtually every basic demand. When such uses are finely mixed together in an ideal urban form, residents, workers, and visitors in the Boulevard can enjoy a new level of convenience where all their needs can be accessed within walking distance.

HOUSING DIVERSITY

Within the City, there are essentially two types of homes: apartments and single family houses. Yet, Columbia’s demographics show a much broader diversity of people in age, income level, culture, and race. In order to serve this broad diversity of people, the options for housing must reflect this diversity of people and lifestyles. A greater range of housing creates more options, attracts more households, and provides an environment where urban diversity thrives. And not only should there be different types of housing, there should be many different price points intermingled in close proximity rather than being separated, or worse, isolated.
The variety of dwelling types should include different sizes of detached single family houses, rowhouses, condominiums, apartments, and live-work buildings. In addition, small ancillary buildings with a living space above the garage should be permitted within the rear yard of each principal dwelling for extended family, tenants or guests to reside.

This is particularly important as trends within successful cities show a shift in needs and desires amongst younger families and older, “empty-nest” households. Research proves that, since 2002, these particular groups are looking for these new housing types, the sort of dignified, urban places that suit their unique preferences and lifestyles.
THE TRANSECT

The Transect is a sequence of six environments or character zones from rural to urban. All elements of design within the Boulevard, and the City as a whole, should be arranged according to this conceptual framework, from unadulterated wilderness to man-made urban centers. The least intense rural environments are found in the T1 Natural Zone (T1). From this natural, untouched landscape, the Transect becomes progressively more urban, culminating in the most intense environment: the Urban Center Zone (T5). Each sequence addresses elements such as density, plantings, setbacks, building heights, signage, lighting, thoroughfare design.
COMPACT DEVELOPMENT

Within a corridor like James Campbell Boulevard, planning practices have continuously prescribed compact development as an effective method for creating synergy and efficient development by focusing the greatest amount of resources in defined centers, or nodes, that are strategically located at key intersections where there is adequate infrastructure. This pattern of development creates the most sustainable method of change because it utilizes the existing infrastructure to the highest level of efficiency.

As it stands now, corridors like James Campbell Boulevard are essentially long stretches of low-density development that extend themselves for many miles, requiring infrastructure—such as sewer, water, and roads—to extend over the same great distances. The cost of such infrastructure is determined by the distance required to build them. The further a pipe or road must be extended, the greater its cost. Thus, corridors are very expensive to maintain. But when the low-density development strung along these corridors is consolidated into compact centers, the infrastructure becomes more efficient by serving more development with less pipes and asphalt.

Likewise, such compact development further supports mixed-use, walkability, and grid street networks. It should be acknowledged that such an approach is sophisticated and nuanced, as there is no “one size fits all” solution. The Transect provides a method for determining the scale of each center and its surroundings.

NEIGHBORHOOD STRUCTURE

Successful neighborhoods contain a discernible center and clear edge. This organizational concept provides an identity to the community. And while it may be difficult to have a well-defined edge surrounding a neighborhood, it is imperative that its center be well formed. The center of a neighborhood should include a civic open space such as a park, square or plaza depending on its location within the range of rural to urban contexts. This center should have the most urban character in the community, with buildings pulled close to the street and a generous sidewalk in front. If transit is available in the community, the transit stop would be found in the neighborhood center. This type of structure gives the neighborhood an enduring quality that many, if not all, residents seek. However, such structure is currently lacking in the few remaining neighborhoods along the Boulevard.
APPLICATION

When these principles are applied to the issues identified by the community, a series of solutions naturally arise. Each of these solutions is a response to a community issue and is developed to a level that can effectively address the severity of the related problem.

1 SOLUTION #1: RE-IMAGINING THE JAMES CAMPBELL CORRIDOR AS A MULTI-WAY BOULEVARD

This is the core concept of the plan. As stated before, James Campbell Boulevard is currently a boulevard in name only. It lacks many of the critical features that a true boulevard possesses, features that are best characterized by the Complete Streets principle. Today, the community characterizes the Boulevard as being unsafe. Analysis further shows that the Boulevard is hostile to pedestrians and cyclists, despite the fact these travelers already access the road on a daily basis. Redesigning the road into a multi-way boulevard can make it safer, better capable of managing concentrated traffic volumes, provide new connections for multi-model transportation, and also enhance the existing character of the corridor. This solution address Issues Four, Five, Six, and Seven respectively.

2 SOLUTION #2: RESTORING CRITICAL CONNECTIONS IN THE EXISTING THOROUGHFARE NETWORK

Analysis of the existing conditions shows that several crucial connections are missing in the existing thoroughfare network. This contributes to the “funneling effect” whereby traffic volume is concentrated on single arterial roads. In order for the new multi-way boulevard to function properly, the entire network must be improved through interconnectivity. With a proper series of connections, a grid pattern can be established. Such a grid network can provide secondary routes to various destinations. Combined with appropriate adjustments to traffic signals and expansion of new signals at key intersections, this solution can improve the efficiency and safety of the boulevard, addressing Issues Four, Five, and Six.

3 SOLUTION #3: REDEVELOPING THE COLUMBIA MALL

The community has been outspoken in its opinion that existing commercial development is outdated and unattractive. The primary example that has been referred to time and again is the Columbia Mall. Though once a symbol of the corridor’s success, the mall has since become a predominantly vacant space that lacks the investment and appeal that is necessary for its survival. As residents continue to travel
to competing destinations for their shopping, it becomes increasingly imperative that the mall changes to a new model that emulates the best characteristics of Columbia’s most-loved places. By redeveloping the site to its highest potential, the corridor could re-use much of its existing “grayfield” land while enhancing existing infrastructure. Such actions could become a catalyst for new activity and interest in the corridor. Such a redevelopment could also become the proof of concept for the benefits of compact, mixed-use development, thus becoming an effective solution to Issues One, Two, Three, and Seven.

**SOLUTION #4 REDEFINING THE CORRIDOR AS A LIVABLE PLACE**

During the charrette, community members commented frequently on the fact that the corridor feels devoid of people, vacant and without any sense of pride. The cause of this is clearly seen by the lack of residents in the area, as indicated by the existing conditions analysis. There are a few neighborhoods along the corridor, mostly located at its periphery. These neighborhoods are essentially isolated by their surroundings. Commercial development is built to a completely different character and oriented with its proverbial back facing the adjacent homes. Combined with the lack of connections, both figurative and literal, and it becomes clear that the existing environment does not support or invite new residents to call the Boulevard home. For these reasons, it can again be safely said that the corridor is not livable. Few live there.

For the sake of economic resiliency, sustainability, and livability, it is crucial that the corridor be planned for new residential development. Such development should manifest itself in a wide variety of forms, such as high-density condominiums, rowhouses, and small-lot single family houses. There are many underutilized spaces where such development can occur. By providing this level of housing, the community can have a unique opportunity to live in a true urban environment with all its many benefits. Workers can live close to their jobs and reduce their dependency on automobiles; other residents can enjoy convenient, walkable access to critical needs; property owners can market their land for these new uses, reducing their reliance on commercial markets to support their costs and needs; and the community at-large can then witness a new place that possesses the people, vibrancy, and pride that they feel is currently lacking. All these benefits can be accomplished by making the corridor a livable place, which addresses Issues One, Three, and Seven.
JAMES CAMPBELL BOULEVARD STRATEGIC CORRIDOR PLAN

Plan

Plan
A GREAT PLAN EMBODIES A GREAT DREAM INTENDED FOR ALL.

“dream” *noun*

A strongly desired goal or purpose
An important first step in the Charrette design process is the creation of preliminary schemes. These schemes are developed separately, by two different planners, utilizing the established principles and components to address the issues defined by the community. Though it requires a significant amount of effort and time, the benefit of this approach is that it ensures that a greater number of alternatives and ideas can be incorporated into a final consolidated plan.

The first scheme is recognized for its three major centers of compact development. Two of these centers are built upon pre-existing destinations in the corridor: the Maury Regional Hospital and the Columbia Mall. The third center is located at the intersection of Highway 31 and James Campbell Boulevard, which is the second largest intersection in the study area.

Within these three centers, redevelopment and intensification is shown by the addition of new “liner” buildings along the street frontages. Community greens are provided at the core of this high density development. Meanwhile, existing development, shown in red, is enhanced with greater building density and new roads that restore important connections at Lawrence Street, Shadybrooke Street, and other local thoroughfares.

Finally, this plan shows a critical realignment of Hatcher Lane to intersect with Union Place, leading to the new village center planned at the greenfield site near Trotwood Avenue and James Campbell Boulevard.
PRELIMINARY SCHEME 2

The second scheme distinguishes itself by providing a fourth center of compact development at the intersection of James Campbell Boulevard and Highland Drive. This center is notably smaller in scale and scope when compared to the other three centers—all of which occupy the same locations found in the first scheme. The intent of this fourth center is to provide a neighborhood-scale development that could fill a specific gap and serve the critical needs of those that live at the periphery of the other three, larger centers.

Other notable distinctions include the addition of several more public green spaces in smaller pockets around new and existing developments. These spaces are provided to enhance the value and appeal of certain areas that are currently left vacant as “grayfields” in the existing condition.

Likewise, a dense, improved thoroughfare network is designed to provide the same reconnections and new connections at critical points. Hatcher Lane is also shown with a realignment that brings it to the Union Place intersection. Finally, though the greenfield development at Trotwood and James Campbell does not show the outlay of buildings, it does provide an internal network of thoroughfares that divide the property into a defined city block pattern that can support high density development, walkability, and a healthy neighborhood structure.
<table>
<thead>
<tr>
<th>Process</th>
<th>Context</th>
<th>Principles</th>
<th>Plan</th>
<th>Toolkit</th>
<th>Strategies</th>
</tr>
</thead>
</table>

**CITY OF COLUMBIA, TENNESSEE**

- **TROTWOOD AVENUE**
- **PICKENS LANE**
- **BROOK EMAEADE**
- **SHADYBROOK STREET**
- **HATCHER LANE**
- **EXPERIMENT LANE**
- **JAMES CAMPBELL BOULEVARD**

**THE BOULEVARD**

**COMMUNITY CENTER**
After examining both schemes for their potential benefit, a synthesis of the two yielded the final redevelopment plan.

Notable refinements include the four centers, which are carried over from the second scheme. In the final design, the two centers that utilize critical existing destinations like the hospital and mall are designed as “community centers”, meaning that these high-intensity centers will continue in their function as regional destinations with unique attractions marketed to residents of the greater South Central Tennessee region. The next level of centers, located at the corridors intersections of Highland Avenue and Highway 31, respectively, are designed as “neighborhood centers”. These centers are built at a reduced scale but still maintain a high density pattern of development that provides mixed-use and variety of amenities to serve the immediate community surrounding them.

Other features that are consistent with both schemes include the realignment of the Hatcher Lane/James Campbell Boulevard intersection, the reconnection of critical streets to create new alternate routes of travel, a final realization of a true grid pattern of streets, and a consistent placement of new buildings along the edge of all street frontages to define the public space and create a greater urban setting.

A new feature added to the design is the partial greenway that extends along the existing waterway that courses along James Campbell Boulevard and connects with Bigby Creek to the west. Though the greenway is not fully complete due to existing topography and development, it serves as another natural amenity to compliment the new community greenspaces within each center. Altogether, the plan emphasizes the restoration of the corridor through the addition of new public spaces, redevelopment of vacant grayfields, and the realization of a true urban environment through a new city block structure.
JAMES CAMPBELL BOULEVARD MULTIWAY BOULEVARD

THE BOULEVARD OVERVIEW
The Boulevard is currently designed as a highway serving high-speed traffic despite the fact that it has outgrown this function. With the high amount of pedestrians, cyclists, and destination traffic frequenting the thoroughfare, the Boulevard must be redesigned to support multi-model transportation and well-managed traffic flow. The new multi-way boulevard concept achieves this goal by utilizing existing right-of-way for dedicated sidewalks and bicycle lanes. Street trees are planted alongside these facilities to buffer vehicular traffic and encourage slower speeds. Over time, side access lanes are also provided along private frontages to improve access to adjoining properties.

PRIORITIZED AREAS

Vehicular Facilities
This design prescribes a narrowed lane width from 12 to 11 feet; this is a proven traffic calming technique. Furthermore, this provides additional space to install the other necessary streetscape features, such as bicycle and pedestrian facilities.

Bicycle and Pedestrian Facilities
A 10-foot travel lane is installed on both sides of the multi-way boulevard to grant pedestrians and cyclists safe entry and travel along the busy thoroughfare.

LOCATION KEY MAP

JAMEs CAMpBEll BOULEVARD muLTIWAY BOuLEVARD
RECOMMENDATIONS

1. Insist on the full design of the multi-way boulevard, including all multi-modal facilities. This design is critical to provide safety to non-vehicular users. Any reduction in the travel lanes will result in a reduction in safety for pedestrians and cyclists.

2. Install street trees at regular 30-foot intervals to create a consistent canopy along the edge of the thoroughfare. Street trees will not only buffer traffic and reduce its speed but also enhance the character of the area.

3. A curb-and-gutter installation will help manage stormwater and reduce flash flooding, a noted problem along the corridor.

4. As construction takes place, take advantage of the requisite excavation to bury utilities under the right-of-way to reduce costs and further enhance the new urban streetscape.

5. Install the multi-way boulevard in strategic locations; specifically, along the frontage of community centers to support new development and raise the value of adjoining parcels of land.

6. Phase the installation of side access lanes by coordinating redevelopment along the frontage.

7. Integrate street lighting between street trees to create a pleasant ambiance at night.

8. Ensure that the median is paved with a mountable curb to allow emergency vehicles the opportunity to bypass traffic in instances of high congestion.

The multi-way boulevard creates a “complete street”

Pedestrians crossing the Boulevard

Turning movements from access lane

Example of a multiway boulevard

The Boulevard from the air
MULTIWAY BOULEVARD DESIGN: MEDIAN CUTS

As the public has frequently noted, the median cuts along James Campbell Boulevard are a source of confusion and potential hazard. Analysis shows this is particularly true along the southeastern portion of the corridor where there is a cluster of several median cuts, each less than one hundred feet of one another.

Each median cut allows vehicles to perform left turn movements into opposing traffic. When several such turns are allowed so close together, the likelihood for conflict is high. For this reason, median cuts are almost always reserved for areas where active intersections already exist. With that in mind, the plan identifies where median cuts should be preserved, or removed, based on the existing outlay of intersections along the Boulevard.
MULTIWAY BOULEVARD DESIGN: CURB CUTS

Just as the high concentration of median cuts causes a high potential for conflict, so too does the high concentration of curb cuts cause equal conflict amongst drivers. Curb cuts are also known as the entry/exit points or driveways that serve adjoining properties. Currently, there are many such curb cuts that allow cars to enter the main thoroughfare at any given time, leading to frequent congestion as traffic stops for these unsuspected vehicles. These are seen in Images 1 and 3.

To better manage this activity, Images 2, 4, and 5 show a means to consolidate these cuts and locate them either along side access lanes or in perpendicular alignments that ensure a safer flow of traffic.
MULTIWAY BOULEVARD DESIGN: BEFORE ON-STREET PARKING

There are two approaches to addressing destination traffic along the multiway boulevard. The first, below, shows the use of private frontages for simple side-access lanes serving each parcel.
MULTIWAY BOULEVARD DESIGN: AFTER ON-STREET PARKING

The second image shows the option of providing side access lanes along with on-street parking. This design requires additional space but, with the parking, also provides an additional buffer.
BOULEVARD STREETSCAPE TRANSFORMATIONS

The addition of the multiway boulevard brings into effect new streetscaping that transforms the existing roadway into something much greater and desirable, as shown in the following depictions. In Image 1, the Boulevard ends with a flat, paved shoulder that immediately gives way to uneven terrain sloping downward at a drastic angle. There are no buildings or other features within this undeveloped area. Only utility poles and a very large sign.

However, the second image shows what happens when the utility poles are removed from the roadway. Next, Image 3 shows the immediate improvement that occurs when the multiway boulevard is installed. It is important to note that this new thoroughfare occupies the same amount of space otherwise used for the existing condition in Image 1. Already, with the boulevard installed, the streetscape is truly made complete with bike and pedestrian lanes, street trees, and a much more pleasant frontage for all properties.

Image 4 shows the eventual improvements to the private space as the uneven slope is filled to a flat plane and side access lanes are then added as shown in the cross-section details. With these side access lanes installed, new development can follow with buildings fronting the street and an entirely new urban environment realized.
BOULEVARD STREETSCAPE TRANSFORMATIONS
COMMUNITY CENTER OVERVIEW

This community center serves the study area’s most important attraction, Maury Regional Hospital. It possesses the busiest intersection and the highest amount of pedestrian traffic. As it currently exists, the center experiences high activity at all hours of the day, possesses some of the corridor’s most valuable property, and is ripe for new development. To realize its full potential, the proposed design features a realignment of Hatcher Lane, new development at the corner of the hospital’s property—complete with structure parking—and a replenished street frontage with new buildings along the edge of newly-defined city blocks.

PRIORITY AREAS

Maury Regional Hospital

The hospital property occupies a prominent corner of a major intersection and is thus shown with new development that takes advantage of the location, addressing the street with liner buildings and structured parking to support the hospital’s needs. Priority Area

Enhanced Street Network

Blythewood is extended to form a new intersection perpendicular to Union Place. This expanded street has the dual benefit of improving traffic flows at the center and providing new frontages for development.
RECOMMENDATIONS

1. The potential of this center must be realized by taking advantage of the frontages to the fullest extent. This requires new development that is placed within ten feet of the existing thoroughfare, creating a new urban environment.

2. When extending Blythewood and realigning Hatcher Lane, take advantage of existing spaces between buildings to avoid demolition of property.

3. Ensure the preservation of the central green located in front of the hospital, as it provides valuable civic space for future visitors.

4. Carefully manage access for properties near the intersection. The high volume of traffic requires all entries and exits to be kept at a safe distance from oncoming traffic.

5. Provide surface parking in the rear of buildings, ensuring a consistent urban street wall along the frontages.

6. Given the hospital’s high land values and potential, encourage new development there as a catalyst for future improvements.

7. Provide safe pedestrian features along Trotwood Avenue where crossings are most frequent.

8. Encourage medical office uses to take advantage of the market synergies already in place.
MULTIWAY BOULEVARD DESIGN: TURN IMPROVEMENTS

Existing Thoroughfares

The intersection at Trotwood and James Campbell Boulevard experiences the most traffic volume on any given day. When combined with the nearby intersection of Hatcher Lane and James Campbell, there exists a great deal of traffic that travels along the network. Yet, the network here does not perform in an efficient manner to handle the load. The issue isn’t the volume of traffic necessarily, but the manner in which the current network manages the flow of the traffic.

Existing Possible Turn Movements

For example, the current flow of traffic allows for several turn movements at intersections that are poorly designed. The worst such intersection is at Hatcher Lane and James Campbell Boulevard. Here, the intersection is very close to the Trotwood intersection. Traffic from the Trotwood intersection is often high enough to cause a large stack of cars that extend from the traffic light all the way to the Hatcher Lane intersection, thereby blocking all movement in or out of Hatcher Lane.
MULTIWAY BOULEVARD DESIGN: TURN IMPROVEMENTS

Existing Conflict Points

In the same situation, when cars stack at the Trotwood intersection and block Hatcher Lane, not only does it prevent turning movements onto James Campbell Boulevard, it also prevents turning movements off of the same road. This causes even more congestion on what is already the busiest intersection. And when observed at peak hour, it provides tremendous evidence of many conflict points—conflicts that are also evident in the 2010 crash data that shows this area to possess the highest cluster of accidents from 2010-2011.

Recommended Turning Movement Removal

Fortunately, there is a solution that involves two important actions. First is an immediate alteration to the Hatcher Lane/James Campbell intersection to prevent all left turn lanes onto Hatcher Lane or onto James Campbell. This is accomplished with the following median improvement, shown below:
MULTIWAY BOULEVARD DESIGN: TURN IMPROVEMENTS

Recommended New Hatcher Alignment

The new median improvement would be placed on James Campbell Boulevard where it and Hatcher Lane currently intersect. The second solution is to extend Blythewood from its intersection at Hatcher Lane, continuing it onward to James Campbell Boulevard to join the Union Place/James Campbell Intersection. Once done, the existing 3-way intersection will become a 4-way junction where all turning movements would be allowed and traffic would be managed with a new signal to prevent overstacking at the Hatcher and Trotwood intersections.
INTERSECTION IMPROVEMENTS

Previous analysis of turning movements has shown a number of conflicts in the existing design of major intersections. This is particularly true for James Campbell Boulevard’s intersection with both Trotwood Avenue and Carmack Boulevard. At both intersections, crash data indicates a high number of accidents, most of which have occurred in the right turn lanes that are designed as merge ramps.

In fact, these right-turn merge ramps constitute the highest number of common accidents within the corridor. This is due to the fact that vehicles stack in these lanes and drivers often attempt to merge into oncoming traffic without considering the vehicle that may be waiting in front of them, resulting in a rear-end collision. To prevent future accidents, it is imperative that the intersections be redesigned to manage traffic at lower speeds, thereby respecting the high volume.

Thus, the new designs remove all right turn merge ramps and replace them with 90-degree radii. These new turn lanes require traffic to make their turning movements at much slower speeds. A right-turn traffic signal would also be added to ensure that drivers only execute their movements when there is a clear path dictated by the signalling system, eliminating the most common accidents in the corridor.
CITy of ColumbIa, TeNNeSSee

COLUMBIA MALL REDEVELOPMENT

Today, the Columbia Mall property is recognized for its large single building footprint enveloped by a continuous parking field extending to all sides. These currently vacant parking fields present an opportunity for infill development. The new design shows extensive intensification of the site by installing new buildings in the unused parking fields, followed by additional buildings at the outermost edges to define a strong exterior presence. Parking needs for the site are served with structured parking facilities in the center of each new block of development. Buildings serve as a liner for structured parking.

COMMUNITY CENTER OVERVIEW

To succeed, this design requires the mall’s existing footprint to be reduced to a smaller set of independent buildings. In the remaining space, a central green is installed to unify the space.

James Campbell Boulevard Frontage

Another high priority is the existing terrain along the frontage of the corridor. This terrain possesses a steep downward slope that must be cut and/or filled over time to create critical frontage lots that will address the street.
**RECOMMENDATIONS**

1. Keep three anchors of the four mall anchor buildings. This will allow existing anchor tenants to stay in place and some additional larger footprint tenants to move in.

2. Relocate the movie theater in the new center to create an excellent entertainment anchor. If the theater is not updated soon a new theater is likely to be built in Spring Hill and make a theater in Columbia unfeasible.

3. Add structured parking so that higher densities can be achieved on this property. A public/private partnership with the City would likely be necessary to accomplish this.

4. A new civic building, such as a library, situated in the park would be a good draw and give the City a presence in the new center.

5. Infill the slope with buildings in order to define the corner at the intersection and create value on the portion of the property that has always been valueless.

6. Create a primary civic space in the heart of the redevelopment.

7. Incorporate the brook, if possible, by daylighting it and creating a natural amenity.

8. Build a tower element to give visibility to the center built in a low-lying area.
COLUMBIA MALL - BEFORE RETROFIT

This series of images shows the final transformation of the mall property and its neighbors from a declining, outdated center to a vibrant urban district. The area currently supports a comparatively small number of tenants and is used exclusively for commercial uses. Demand for these uses and tenants has waned in the past decade, leading to declining property values and rising vacancies. The area also suffers for its inability to realize the full potential of the land. All properties in the area are separated by vast stretches of parking fields and valueless space, which is exemplified by the steep slopes along the frontage of the Boulevard. Altogether, the area lacks any cohesive identity and is viewed as being "beneath" the corridor in figurative and literal terms.

The "retrofit", as its termed, is true to its name for its ability to reuse all existing space to realize the area’s full potential. This new concept is deliberately designed to respect the unique character of the City by incorporating architectural features that are reminiscent of Columbia’s historic downtown. With its small footprints, interwoven buildings, peaked rooftops, awnings, promenades, and trees, there are clear vestiges of historic development patterns found throughout the design. This new form is highly flexible in that it can support and attract the wide variety of land uses that are necessary for revitalization.

In such a design, housing can be seamlessly incorporated next to offices and retail. Townhomes, live/work units, apartments, and condominiums can adjoin restaurants and dry cleaners. The broad marketability provides resilience to the corridor since any given space can be resold to virtually any interest. Though full development will occur over the course of several decades, this conceptual design provides the City with the necessary guidance to ensure that every future action heals the area and brings it closer to its final transformation into a livable place that all of Columbia can enjoy.
COLUMBIA MALL - AFTER RETROFIT
COLUMBIA MALL REDEVELOPMENT PHASING PLAN

LEGEND

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

400 SCALE
COLUMBIA MALL REDEVELOPMENT PHASING ILLUSTRATION

PHASE 1

PHASE 2

PHASE 3

PHASE 4

PERIPHERAL PHASE 1A

PERIPHERAL PHASE 1B
NEIGHBORHOOD CENTER OVERVIEW
As a neighborhood center, this area is personified by its smaller scale. Building footprints occupy the same amount of space and orient themselves to the street, creating a consistent level of urban density. However, building heights are limited to two stories each to preserve the sense of neighborhood character. In the instance of Highland Avenue and James Campbell Boulevard, this pattern of development is already established. The major need is to renovate existing structures and provide opportunities for additional development where grayfields exist.

PRIORITY AREAS

Building Renovations
Development in this area is already consistent with the growth pattern identified as sustainable. Parking lots are restricted in size and buildings have very minimal separations, creating a consistent street wall. Nonetheless, existing spaces are outdated and should be renovated to enhance the Boulevard’s character.

Frontage Improvements
Along with building renovations, the frontage of each property should be improved. This area features poorly-defined entrances and very little landscaping, all of which should be remedied.

RECOMMENDATIONS

1. Gas stations are located in many parcels within this center. These businesses provide convenience but degrade the urban form in their current design. Frontage improvements are particularly needed here.

2. New development is immediately possible in a few small areas. Consider removing any minimum acreage requirements to allow infill to occur.

3. Though neighborhoods abut the rear of the frontage properties, there are no sidewalks to connect pedestrians to the corridor. New walkways should be constructed where needed.

4. As a neighborhood center, it is important that the area be less intense. Consider building height limits to preserve the character.
NEIGHBORHOOD CENTER OVERVIEW

Despite the fact that this intersection ties two major arterials within the City’s network, there is less activity in this area when compared to other portions of the corridor. Nonetheless, this neighborhood center possesses tremendous potential as a gateway into the corridor. Several vacant properties are available for new investment. Best of all, multifamily residential neighborhoods already exist nearby, proving the area’s worth as a mixed-use center. Finally, though planned at a smaller scale, this center has the potential to become another high-intensity site as the City grows over time.

Vacant Properties

There are several vacant properties in this area, each an opportunity for immediate investment. As interest rises, the value of these properties can be further enhanced by providing safe access with proper turning lanes and interconnectivity between parcels.

Pronounced Corner Buildings

The excessively wide intersection conveys a sense of emptiness to its visitors. New construction should be placed at the immediate edge of all corner properties to create a sense of enclosure and vitality.

RECOMMENDATIONS

1. Existing gas stations should be retrofitted with liner buildings in front of the gas canopy to provide new leasable space and better definition to the street frontage.

2. For properties located within 300 feet of this busy intersection, interparcel connections will be necessary to prevent unsafe traffic movements near oncoming traffic.

3. Because multifamily developments are nearby, sidewalks should be installed to connect pedestrians to important destinations.

4. Planning should allow for development to grow to a level and intensity that can be consistent with the intersection’s capacity while maintaining the character of a neighborhood center.
JAMES CAMPBELL BOULEVARD STRATEGIC CORRIDOR PLAN

Process  Context  Principles  Plan  Toolkit  Strategies

TOOLKIT

COPPER KETTLE, DOWNTOWN COLUMBIA
BEYOND SPECIFIC DESIGNS, GOOD PLANNING PROVIDES VERSATILE ELEMENTS FOR ALL SITUATIONS.

“el-e-ment” noun

A distinct feature within a larger composition
BUILDING WITH THE SLOPE

“GRAVEL HILL” - STREETSCAPE TRANSFORMATION

The corridor is unique in many ways, one of which is its drastic variations in topography. The most explicit instance of this is found at the site referred to as “Gravel Hill” and otherwise known as the Big Lots plaza. In instances like this, where steep slopes are present, new development is still possible. By cutting the slopes to a sheer 90-degree angle, new buildings can be placed against the vertical grade to serve as retaining walls buttressing the earthwork and new developments can be installed for a variety of tenants. Such developments preserve the urban form and greatly enhances these otherwise useless spaces, which are common throughout.
The following pages illustrate a long-term phasing plan for a non-specific "big box" retail store with surface parking.

- **PHASE ONE**: Typical existing layout with primary building set back several hundred feet from the street. Secondary commercial pads closer to the street. Excessive surface parking between buildings.

- **PHASE TWO**: Center parking aisle converted to street. Mixed-use buildings with minimum setbacks and parking in rear.

- **PHASE THREE**: More parking aisles converted to streets. Mixed-use buildings with minimum setbacks and parking in rear. Liner buildings added to primary box.

- **PHASE FOUR**: Surface and structured parking (as necessary) enclosed by complete blocks of mixed-use. Additional liner buildings added to primary box.

- **PHASE FIVE**: Primary box replaced by scaled-down mixed-use buildings. Structured parking likely necessary at this point.
BIG BOX RETAIL - REDEVELOPMENT PHASING
BIG BOX RETAIL - REDEVELOPMENT PHASING
The following pages represent a kit-of-parts to be used during the redevelopment of properties along James Campbell Boulevard. These have been developed to comply with the functional requirements of conventional suburban establishments such as surface parking, drive-throughs, and drive-by visibility.

After studying James Campbell Boulevard it was determined that there were five main types of commercial establishments situated on lots of approximately 250 feet by 250 feet, located along the Corridor:

1. Banks with drive-throughs
2. Retail centers
3. Gas & service stations
4. Restaurants with drive-through
5. Car dealerships

The goal of these tools is to create a walkable, pedestrian friendly environment with the same business that are configured in a manner that is hostile and repellent to pedestrians. The approach to each of the typologies is the generally the same with a few differences to address the specifics of each type of business. The general approach is as follows:

1. Pull buildings up to the street
2. Ample sidewalks
3. Parking and drive-throughs in the rear
4. Street trees
5. On-street parking
6. Buildings enclosing the majority of the block face
BANK WITH DRIVE-THROUGH

1. Bank
2. Rear Drive-Through
3. Additional Commercial Space
4. Surface Parking
5. Shared Drive

PRIMARY THOROUGHFARE
CITY OF COLUMBIA, TENNESSEE

GAS & SERVICE STATION (GAS BACKWARDS)

1. Corner Convenience Store
2. Service Bays
3. Gas Pumps
4. Surface Parking
5. On-Street Parking

PRIMARY THOROUGHFARE

SECONDARY THOROUGHFARE
JAMES CAMPBELL BOULEVARD STRATEGIC CORRIDOR PLAN

RESTAURANT WITH DRIVE-THROUGH

1. Restaurant Building
2. Rear Drive-Through
3. Additional Commercial Space
4. Surface Parking lot
5. On-Street Parking

PRIMARY THOROUGHFARE
SECONDARY THOROUGHFARE
PRIMARY THOROUGHFARE

250'
250'
CAR DEALERSHIP

1. Show Room
2. Sales Area
3. Street-Side Special Car Display Plaza
4. Administration/Offices
5. Shared Drive
6. Services Center
7. Shared Drive
8. On-Street Parking
THE BOULEVARD NEEDS AN IDENTITY. WHAT IS ITS ADVANTAGE?

i-den-ti-ty  noun
The collective characteristics by which a thing is definitely recognizable and known.
ECONOMIC DEVELOPMENT

MAKING JAMES CAMPBELL BOULEVARD A DESTINATION

The following items within this section of the Toolkit address a number of potential strengths that should be incorporated into the general marketing and implementation strategy for the corridor.

1. CREATING A NEW IMAGE AND SELLING IT
   Despite Columbia’s assets, the city is currently suffering from a lack of identity. This has contributed to a loss of confidence, which reduces the City’s ability to act aggressively and become a more vibrant and successful community. The City should continue to work with the public to identify and market its strengths and consider developing a concentrated marketing campaign to promote the City regionally.

2. HEALTH AND WELLNESS
   With the presence of Maury Regional Hospital, the City has a unique asset that surrounding communities cannot match. The hospital is one of the top ten in the country and represents a high-quality healthcare system that creates tremendous value in the corridor and attracts visitors throughout Middle Tennessee. The corridor, if not the City itself, should capitalize on this asset by promoting active, social lifestyles—which are a natural by-product of any true livable community.

3. SPECIAL EVENTS
   The “Mule Capital of the World” already has a successful and regionally renowned “Mule Day” celebration. To building on this strength, Columbia should consider more ways to attract both locals and tourists by organizing additional events that are unique and interesting. Imagine a health and wellness fair, a music festival, or an outdoor art exhibition. The more events that are held along the corridor, the greater the excitement and interest that is generated, which has the spin-off effect of attracting new residents, businesses, and tourists.
A CENTER FOR “COOL” JOBS

PLACE-BASED INDUSTRY
In today’s idea-based economy, where creativity and innovation are valued even more than experience and seniority, a new type of business environment has taken shape. The internet and other technologies have bridged the gap of distance, time, and proximity to natural resources. The new resource is creative people.

The office park of the 80’s and 90’s has been replaced with mixed-use urban lofts and warehouses. Previously, municipalities competed to attract business with tax breaks or Class A office space. Today many companies will only locate in a community that is walkable, livable, and diverse. This is because the best employees will no longer settle for a conventional lifestyles and are seeking employment in vibrant cities with active street life and culture.

To take advantage of this shift in culture and mindset, Columbia should incentivize the creation of high quality built environments and then rigorously tailor a marketing message to features this aspect of the City. Investments in place-making have been shown time and again to pay off enormously and should be considered an important part of an economic development strategy in addition to providing quality of life benefits to existing residents.
NEW BUSINESS INCUBATOR SPACE

Local start-ups and new businesses form the foundation of a community in the sense that they generate both financial and social capital. Local businesses serve as a morale booster that helps bolster the local economy and create the entrepreneurial spirit and buzz that attracts other creative types and an increase in tourism activity. The process of encouraging new business development can be spurred by the provision of incubator space.

Incubator spaces can be lightweight structures that are modular and moveable, or they can be permanent and built in a location near the commercial center of the community. Rents should be modest during the business start-up phase with the understanding that successful ventures will move out of the incubator and into their own space once they are more established. Incubator spaces can also be used to house artists and other creative types.
ATTRACTION RETAIL

1 USING SHOPPING MALL STRATEGIES TO COORDINATE THE CORRIDOR
Mall managers are incredibly strategic about the kind of businesses they pursue and the quality of the shopping environment, examining even the most minute detail of displays, lighting, and floor surfaces. James Campbell Boulevard can learn much from this approach. Generating a strategy to identify and attract the right kinds of business with financial incentives could help fill vacant space and address gaps in the current retail offerings. Visual improvements to shop facades, displays, and sidewalk furniture would help generate new attention, drawing locals and tourists to enjoy the new urban environment.

2 RECRUIT INDEPENDENTLY-OWNED BOUTIQUE BUSINESSES
There is a growing trend among the creative class to seek out locally produced craft products, such as locally produced coffee, cheeses, and other products that offer improved quality and taste that are unmatched by national distributors. Columbia already has several of these businesses enjoying success outside of the corridor. Columbia should seek out more of these kinds of entrepreneurs looking for space in up-and-coming places that can support their business ventures.
ATTRACTION THE CREATIVE THINKERS & KNOWLEDGE WORKERS
Columbia is located within an easy drive of Franklin and Nashville, but has the distinct advantage of lower real estate prices. This positions Columbia as an attractive community for both workers commuting to points north as well as to creative class entrepreneurs who want proximity to the “big city” but without the higher price tag.

Adding new building types along the corridor as alternative choices to the predominantly historic single family stock would provide new options that might appeal to this group. Loft-style condos, rowhouses, and live/work spaces would diversify housing options and potentially draw new life into Columbia.

FAMILY FUN
Columbia should promote and market amenities currently in place, including historical attractions, museums and other unique attributes, while also promoting the kinds of improvements that would attract more families, including new, high-quality housing and more activities that are fun for kids, potentially including teaching farms, more playgrounds, and family-friendly events.

MIXED HOUSING & DIVERSITY
Demographic diversity of people in age, income level, culture, and race provides a sense of interest and vitality to the most loved cities in the world. In order to attract this type of diversity to a community, the physical form must be conducive to their varied lifestyles. A key component of this plan is that it creates an environment where diversity thrives through a mix of housing options. There should be many different types, sizes and price points of housing intermingled in close proximity rather than being separated. The community should include a range of living experiences from rural to urban.
As stated earlier, the variety of dwelling types should include different sizes of detached single family houses, rowhouses, apartments and live-work buildings. In addition, small ancillary buildings with a living space above the garage should be permitted within the rear yard of each principal building house for extended family, tenants, or guests to stay or live. Residential units should be available either for leasing or for ownership. This allows young and old, singles and families, and residents having a range of income levels to find dignified places that suit their preferences and lifestyles. An additional benefit of this mix of housing types is that workers can live within walking distance of their jobs so they are no longer required to commute to work, worsening traffic problems.
BICYCLING

REGIONAL BIKE CONNECTIONS
Columbia is fortunate to be located at in an otherwise rural area of Tennessee. There are significant opportunities to build on this unique asset and attract more cyclists to the City. Stronger connections can made from the corridor to the Riverwalk greenway and further on to rural highways where cyclists already frequent. In addition, safer and more explicit bike connections can be made to connect the corridor to the downtown, nearby neighborhoods, and parks.

LOCAL BIKEWAYS
As already shown, the corridor lacks designated bike lanes and other kinds of bikeway infrastructure. Fortunately, there are ample opportunities to inexpensively integrate bikeways into existing street sections. Many of the commercial streets in the corridor, and the City as a whole, are overly wide. Bike lanes can be used as a strategy to both enhance bikability, complete a street, and slow traffic.
CIVIC SPACE

1. NEIGHBORHOOD PARKS
Columbia is blessed with a fair number of larger recreation areas; however, there is a noticeable dearth of smaller neighborhood parks that can serve as gathering places. The City should consider finding locations for playgrounds within an easy walk of most homes within the corridor to better serve the needs of local families and help attract new families to the City.

2. GREENWAY
Though the plan shows a partial greenway, there is a clear opportunity to extend this potential network to surrounding neighborhoods, districts, and eventually, to the downtown and Riverwalk. This greenway could provide a terrific asset to Columbia as it markets itself as an active community supporting recreation and outdoor living. The greenway would also help stitch together many existing neighborhoods and daylight the Stream that runs along the Boulevard, giving people new reasons to explore this beautiful City.
SELF-RELIANCE & FOOD SECURITY

As the cost of food and fuel increases, concerns rise about food security, or the idea that every person in a community will have consistent access to enough food to sustain a healthy and vigorous life. Because the majority of food for the average American travels about 1500 miles from the farm to the table, most families and communities, other than those who live on or near a farm, are in jeopardy if there is a disruption in the long distance food shipping supply chain.

Self-Reliance, also known as Urban or Backyard Homesteading, is a growing trend in which individuals, families, and communities seek to grow as much of their own food as is practical and provide for other basic necessities without much or any input from outside sources. Several proven, intensive, low-effort food-production systems include Square Foot Gardening, container gardening, and rooftop gardening.

COMMUNITY DESIGN FOR FOOD PRODUCTION

Every effort should be made through design to create spaces that accommodate opportunities for food production at all scales from rural to urban. For example, on smaller lots it can be difficult to find more than a few feet that receive enough sun each day to grow fruits and vegetables. Portions of civic spaces within a community can be reserved for community gardens and utilize edible landscaping.

COMMUNITY GARDENES

Community gardens can be established on blighted or underutilized properties, including parking lots, as a way to generate more activity and potentially spur redevelopment. There are several locations that could be converted to small-scale community gardens, helping to bring people to this underutilized area of the City.
LIGHT IMPRINT DESIGN

A key element in better addressing stormwater management is the reduction of impervious surfaces. Automobile dominated sprawl development has made stormwater management more difficult and expensive, as it has resulted in increased impervious surfaces in the form of wider roads and large parking lots.

In the past few years, however, there has been a push to deal with stormwater in a more sustainable way in order to reduce the infrastructure needs and protect ground water. One of the first attempts was known as Low Impact Development (LID). While LID was based on sound ecological principles, its solutions were based on conventional suburban land use and planning concepts. The result was more auto-oriented sprawl that utilized natural infiltration. However it did not address the numerous other environmental ills created by the single-use, car-dependent development form it was predicated upon.

Building on the groundwork laid by Low Impact Development, a new approach called Light Imprint has been developed by Duany Plater-Zyberk & Company. Light Imprint utilizes New Urbanism as its design philosophy and, according to the Light Imprint Handbook by Tom Low, incorporates natural drainage, modern engineering infrastructure, and innovative infiltration practices. Many of the elements of Light Imprint are time-tested and provide a comprehensive collection of methodologies that have been used for generations to deal with stormwater runoff. Each tool is organized according to its appropriateness across a range of rural to urban contexts. Light Imprint reduces the need for expensive stormwater infrastructure and provides more sustainable solutions than conventional engineering approaches.

MAINTAIN & REPAIR HYDROLOGICAL PATTERNS

All sustainable stormwater solutions should begin with the simplest and least technology-based steps. The easiest technique that can be implemented with the least expense is preserving the existing hydrological patterns of drainage and percolation, allowing the land to handle the water naturally without much, if any, interference from human intervention. Successful, sustainable stormwater management is largely related to staying out of nature’s way and avoiding the problems we struggle to remediate. In Columbia, some of the natural hydrological
patterns in the landscape have been compromised by years of development. Opportunities exist to restore water systems and create an interconnected network of greenways that can begin to function as a system for natural infiltration and human enjoyment.

NATURAL INFILTRATION
An essential element of sustainable stormwater management is natural infiltration. There are a number of solutions to collect water during storm events and enable it to percolate naturally into the ground, recharging the aquifer in the process. The determinative factor as to whether infiltration can occur is the permeability of the surface onto or over which stormwater falls or flows.

PAVING
Paved surfaces including roads, parking lots, sidewalks and other hardscaped areas typically utilize asphalt, concrete or tar surfaces which are all impervious. As a result of the paving material chosen and their lack of permeability, these surfaces tend to exacerbate stormwater runoff related issues. There are many materials that are more pervious and are time-tested including more recent innovations in paving technologies such as pervious asphalt and concrete. These have been developed to allow water to infiltrate large- and small-scale paved surfaces.

RAIN GARDENS & BIORETENTION SWALES
A natural infiltration solution that incorporates short term storage of stormwater in basins and swales are rain gardens. A rain garden, also known as a vegetated infiltration basin, is a man-made or naturally occurring low spot in the landscape in which stormwater is collected and stored temporarily until it infiltrates into the ground. Rain gardens can be designed for recreation as well as serving their stormwater infiltration function. As a recreational civic space, they work well because they store rainwater during a storm event and shortly thereafter when people are not usually playing in parks. After the water percolates they are available as a park again. With some adaptation, Rain Gardens can be located in all settings, from the most rural to the most urban locations.

A more utilitarian solution that utilizes the same concept of short term storage and infiltration is the bioswale. Bioswales are linear depressions with gently sloping sides, planted with vegetation that treat stormwater runoff from rooftops, streets, and parking lots by slowing and filtering it as it passes through them and then channeling any excess water to the storm sewer. The naturalistic aesthetic of the plantings make them an excellent solution for rural and suburban applications.
GREEN STREETS

Green Streets are thoroughfares that manage stormwater runoff at its source by incorporating vegetated water catchment and filtration devices in the form of small rain gardens and bioretention systems. Components such as flow-through planters and other sustainable stormwater solutions allow stormwater from the street to enter planters through cuts in the curb where the plant material removes impurities and allows water to naturally infiltrate or be stored elsewhere. Water-loving plants and those that are able to remove the impurities while thriving so close to traffic in more urban environments are used in green street design, adding beauty and function.

RAINWATER HARVESTING

Harvesting rainwater is the collection and storage of rainwater that otherwise would be lost during a storm event. For centuries, rainwater has been collected for drinking, irrigation and other uses; however, since the advent of indoor running water, this practice fell out of favor. More recently, as sustainable resource use has increased, this practice has gained popularity. Rainwater is now being captured and used for washing cars, showering, flushing toilets, washing clothes, and in some places, even for drinking by treating it with ultraviolet light.

Rainwater can be harvested from rooftop or ground catchment systems, either in very simple or more complex systems, depending on the intended use of the water. Most systems are simple and consist of gutters and pipes attached to roofs channeling rainwater to a storage facility. The form of storage varies, based on the scale of the system and whether it is located in a more rural or urban setting. The most rural storage option is the pond. Cisterns, large concrete, wood or plastic storage chambers that often are installed underground, provide another storage alternative suitable for use both in rural and more urban areas.

A small storage alternative that works well for residential applications is the rain barrel. Rain barrels have become very popular in recent years and are sold even at nation chain grocery and hardware stores. Because these systems at their simplest can be added to existing gutter systems with little cost, rainwater harvesting is an easy strategy that should be widely implemented at all scales.
<table>
<thead>
<tr>
<th>Process</th>
<th>Context</th>
<th>Principles</th>
<th>Plan</th>
<th>Toolkit</th>
<th>Strategies</th>
</tr>
</thead>
</table>

**GREYWATER RECYCLING**

Greywater is water that has been used for laundering, dish washing and in showers and sinks. Depending on the local climate and soil conditions, it is possible to recycle grey water for several uses such as landscape and food irrigation or constructed wetlands. Recycling greywater reduces the amount of fresh water needed for each household and reduces the amount of wastewater entering the sewer system.

**SHADE TREES**

The use of trees planted around houses is a simple and beautiful solution to reducing heating and cooling needs for buildings. When planted on the south and west sides of buildings, shade trees drop their leaves during the cooler fall season allowing warming sunlight to reach buildings. Additionally, they create a lush canopy in the warmer months providing shade to keep the house cool. This provides, a low tech, low cost solution to reduce the energy needs of buildings.

**GREEN ROOFS**

Green roofs are waterproof, vegetative roofing systems in which a root barrier, drainage system, light weight planting medium and plants are layered on top of an impermeable membrane. They serve to insulate the building, reduce heating and cooling costs, absorb heat from sunlight, and to limit solar heat reflection into the atmosphere which contributes to the phenomenon known as the “heat island effect”. Stormwater not used by the vegetation can enter and be stored in a collection system such as rain barrels or cisterns for later use. Green roofs are not only utilitarian, they can also be designed as an outdoor garden amenity. Finally green roofs can be used as part of an urban agriculture program to produce food for the building or others nearby.