



Phase 2 Pulaski Highway Redevelopment Study

Final Summary Report **October 2010**

This study was prepared under contract with Harford County, Maryland with financial support from the Office of Economic Adjustment, Department of Defense, and in coordination with the Chesapeake Science and Security Corridor (CSSC) Consortium. The content does not necessarily reflect the views of the Office of Economic Adjustment or Harford County.



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PULASKI HIGHWAY STUDY PHASE TWO FINAL REPORT

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OVERALL PROJECT SYNOPSIS

This study proposes to target an 850-acre area in Middle River for redevelopment as a new, employment-oriented mixed-use district. Done in concert with several larger efforts, this proposed redevelopment has the potential to: transform the targeted area into a vital, business technology center; attract quality BRAC jobs to Baltimore County; support the BRAC changes at Aberdeen Proving Ground (APG); and step up the ongoing revitalization of the Middle River area.

This proposed project offers a new County prototype for coordinated, community-scaled redevelopment in areas comprised of many small parcels with multiple property owners. Much of the land that the County has targeted for revitalization fits this description; thus this proposal offers a valuable new tool.

The envisioned district reflects the growing national demand for more livable mixed-use workplaces, and for compact walkable communities. Implementation of this proposal would help to achieve the County's goals for more sustainable development with significantly less impact on roads and the environment as compared to lower density single-use patterns.

BACKGROUND

The study was undertaken by the Baltimore County Office of Planning with the assistance of other County and State agencies, and through grants from the Chesapeake Science and Security Corridor (CSSC) Consortium. The CSSC views the project as a potential model and catalyst for similar, focused planning and coordinated redevelopment elsewhere along the corridor.

A two-phased study to select an optimal location for redevelopment, test feasibility, engage key interests, and otherwise lay the groundwork for focused planning, has been completed. A final planning phase is anticipated in 2011.

OPPORTUNITY

The district occupies a prime location and enjoys excellent regional accessibility. It is minutes from I-95, the Baltimore Beltway, and the MARC commuter rail line, affording easy access to business, professional, and government centers throughout the region. Within a 25-minute reverse commute of APG, the district can be expected to attract BRAC contractors and business

service companies in the next phase of growth at APG, as well as BRAC employees and their families.

Redevelopment here would leverage significant recent and ongoing County and State investments in road improvements. The targeted area is well located to help catalyze longer-term growth in nearby areas as it will serve as a gateway to the Middle River area and promote change up and down the Pulaski Corridor. Market demand exists for such a district at this location, and positive market projections are not dependent on BRAC-related growth. Physical road and land capacity is available to accept growth.

The District is already zoned for high-intensity employment uses. However land developers and businesses have overlooked the area for decades because of the unattractive appearance of the highway and the aging development along it. Other obstacles to change include piecemeal ownership and limited local street networks that make it difficult for any one owner to make a change large enough to alter this image and reputation. A combination of factors such as lot sizes and shapes, ownership patterns, site design regulations and market perceptions all work to reduce the area's growth potential. As a result recent and projected development is very low density. Without intervention, the area would build out with contractor yards, storage buildings, warehouses and other one story buildings with surface parking lots. Coordinated community scale intervention is needed to capture the greater growth opportunity.

BENEFITS

The study shows that the district, through coordinated redevelopment, can yield significant benefits for Baltimore County, district property owners, and the surrounding community. Based on a conservative scenario designed in the first phase of the study, coordinated redevelopment could easily triple annual property tax revenues, from less than 2.3 million dollars today to 9.5 million dollars or more in less than 25 years. By comparison, a "no action" scenario might increase annual property tax revenues by only 2 million in the same time period.

Current County employment projections for this area, as shown in Baltimore Metropolitan Council traffic model data, estimate as few as 600 new jobs and 300,000 square feet of new employment-oriented uses might be built here in the next 25 years. By comparison should the County and property owners pursue the transformation of the area into a thriving mixed-

use workplace, this study estimates that from two to six million square feet of new employment-oriented uses might be built in the same time period yielding a minimum of 4200 new jobs. Significant amounts of supportive retail space, new housing units, high-quality public space and amenities would be created. The envisioned high-quality redevelopment would not only benefit Baltimore County, but would also effectively support the BRAC mission, helping to attract and retain a talented workforce in the vicinity of APG.

Property owners would benefit from rising property values, creating greater opportunities when they are ready to redevelop or sell their property. Local businesses would benefit by from a stronger customer base created by local reinvestment. Local residents would enjoy an attractive walkable environment, new public gathering places, enhanced shopping, housing, and employment opportunities and other amenities. By conserving environmental resources, the County would realize more growth on less land at an optimal location.

While major transit and new crossings of the CSX rail line would create a more connected district, traffic studies indicate that the envisioned district could accommodate projected growth with a more modest infrastructure plan with roads currently planned and a series of parallel at-grade connections. As a compact walkable community the district would generate significantly fewer trips than would conventional growth. It would help relieve future congestion on regional roads by creating alternative routes for travel on a developer-funded local street network, and by promoting walking and transit use.

PROPOSED COUNTY ACTIONS

To achieve community-scaled, compact walkable growth in this area, coordination of private action is needed along with new regulations and other mechanisms of support. As this study explains, the County role would primarily be to facilitate and approve this planning and help to coordinate private investment. Most of the improvements needed to support coordinated redevelopment can be undertaken by the private sector. County investment should be limited.

Three public road projects are critical to getting the transformation underway. One is a timely commitment by the State Highway Administration to beautify a segment of Pulaski Highway as previously requested by the County. The second is County construction of the first phases of the planned Mohr's Lane bridge

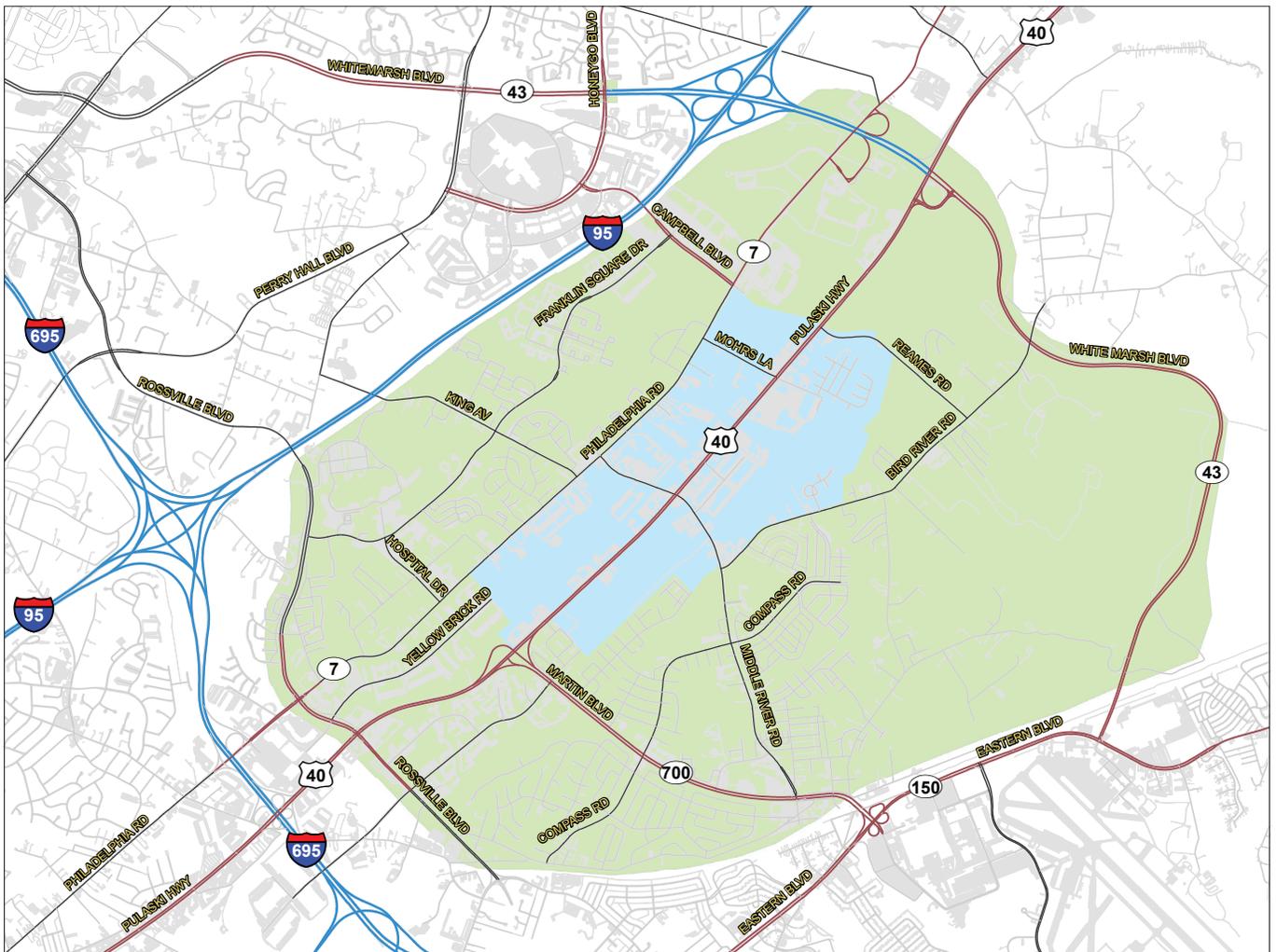
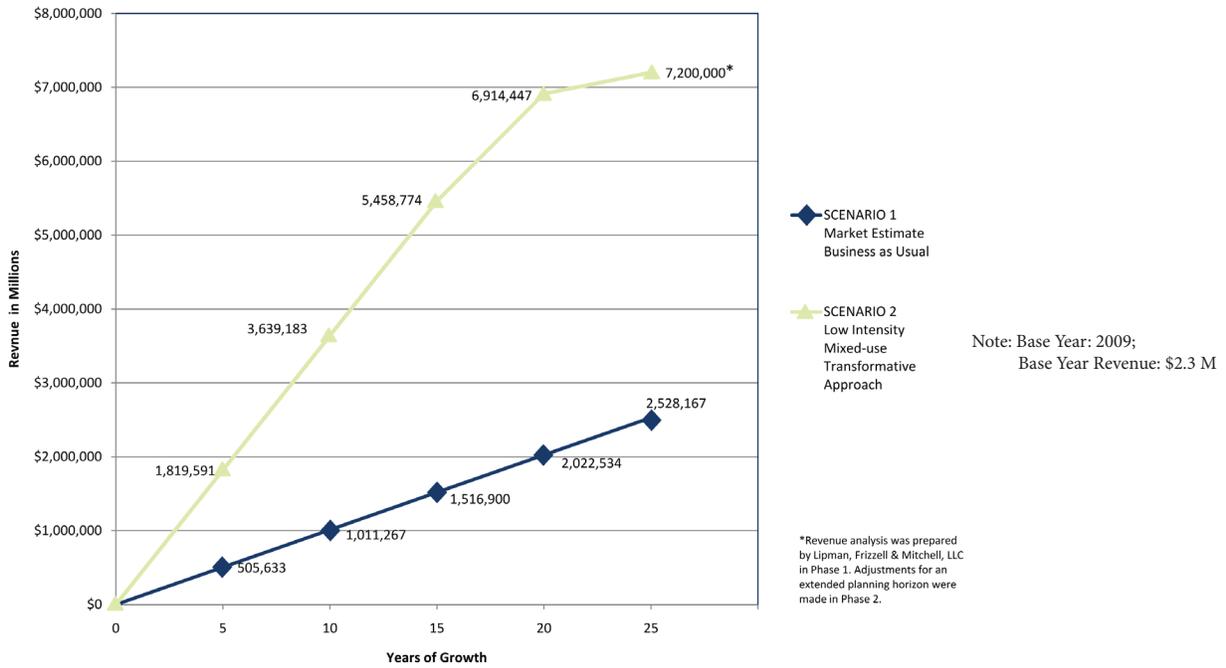
project. The third is the County's planned Yellow Brick Road extension which should, with property owner cooperation and developer contributions, be a capital improvement project that extends from its current end to Mohrs Lane as recommended in a 1990 community plan. These projects should give the district needed connectivity and access and an improved physical image, sufficient to change the market's perceptions of this area.

Matching the design details of these projects to support the vision of a walkable district will signal to investors a unified direction and purpose. The infrastructure projects also offer the opportunity to continue to build community consensus for the direction of change before private development proposals arrive. Together these actions signal to the private sector that the area offers a reasonable investment risk.

NEXT STEPS

The community and the property owners support the proposed concepts and anticipate that the County will undertake the third phase of this project in 2011. The County's next step has two parts. First, the County needs to create and approve a detailed district plan and new zoning ordinance with the input of the property owners and the community. Second, the Maryland Department of Transportation needs to commit to the incremental design and improvement of a three-mile section of Pulaski Highway. A grant has been requested from the Chesapeake Science and Security Corridor Consortium to help with the County task. Continued County conversations with MDOT are needed to ensure that State planning can occur during the same time period if possible.

Figure 1 - Projected new net annual revenue



LEGEND: ■ Project Boundaries ■ Transportation Influence Area

PHASE 1 STUDY EXECUTIVE SUMMARY

The County proposes to plan for the creation of a branded mixed-use employment district along a five mile section of Pulaski Highway and covering about 850 acres in the Middle River area of the County. This report documents the findings of the second phase of a three phased process to plan for change in this area. In addition to this summary report a separate Transportation Report provides great detail on the effort.

This phase of work tested and confirmed the benefits of developing the proposed mixed-use employment district and the amount of growth it might accommodate. As envisioned, the targeted community would be transformed. It would have both a viable business district and a high quality of residential life. This vision is a result of in-depth project analyses, stakeholder perspectives, and communications with County and State agency staff. As an outcome of this work, key decision makers and property owners have more certainty about the feasibility of redevelopment and growth in the study area, and next steps the County and stakeholders should take to support this vision.

An initial framework concept and market analysis prepared in Phase 1 formed the basis of concepts investigated and tested during this Phase 2 effort. The Project Team conducted specific studies in the areas of transportation and land use to identify the needs and opportunities provided by higher density development. Team members also examined existing rules governing development and discussed them with local property owners. The work also included detailed mapping of environmental features of the study area for use during the next phase of planning. The Phase 2 activities and findings are organized in the following chapters of this report:

- Project Background
- Scenario Development and Analysis
- Transportation Considerations
- Key Issues and Findings
- District Plan Elements

RECOMMENDATION HIGHLIGHTS

The stakeholder involvement activities of this project yielded concepts and recommendations from study area property owners, residents and county staff. The following recommendations provide a platform for continued planning and stakeholder engagement that will occur in the study area.

- **Redefine Plans & Development Tools for a New Identity:** Using a 25 year horizon, develop a specific plan for a defined area that should become a well-planned mixed-use employment district that is walkable, sustainable and supportable by transit. Create new land use and zoning tools to encourage private sector participation and coordinated development among property owners.
- **Transform Pulaski Highway:** Redesign the corridor into an attractive boulevard, accommodating safe multi-modal travel along and across its route, while maintaining its functions as an urban arterial, and managing ample access to abutting businesses. Land development planning should be coordinated / integrated with highway improvements to enhance market advantage of this area.
- **Create a Network of Streets:** Create an interconnected network of attractive streets, sidewalks, alleys drives and parking that offer property owners a chance to redevelop or renovate existing properties. Create this secondary network to not only support new development, but to also serve as a reliever route to other crowded roads offering residents a wider choice of routes to follow and fostering higher levels of walking as well as bicycle and quality transit to enhance this vision.
- **Manage the District Size:** The area should be appropriately sized so that success can be achieved incrementally with active participation of local businesses, home owners, the County and the State. This district should contain at least as much employment opportunity as the current zoning and market trends would allow. It should create a critical mass of uses to support a vital walkable community and bring needed public and private investments.

Initial market projections have shown that should the county pursue a transformative approach, the envisioned district could attract over 4,200 new jobs, in two to three-million square feet of employment space, new community supportive retail, and 2,000 or more homes, as well as higher quality public spaces and amenities with the next 25 years. Adequate school capacity should be part of this plan. The Project Team

concluded that the district vision can be achieved with moderately- scaled development; in the near term. It can start with surface parking and can continue to accommodate light industrial businesses. The team also found that more intense development patterns can be attracted in the near term, and that the district should continue to intensify and grow over the longer term.

ANTICIPATED BENEFITS OF A TRANSFORMATIVE CHANGE:

- Improved business vitality with a greater ability to attract quality businesses, customers to businesses and tenants to building spaces, and ability to attract quality developers to area lands for sale.
- Improved residential quality of life, with more housing choices in a village-like setting that offers shopping, schools, social/civic, transit and work opportunities within an easy comfortable walk and or bike ride from home.
- Greater certainty of a win-win, solution during the development approval process for both community and applicants with less time and expense on all sides.
- Creation of more and better jobs sooner through more rapid development.
- Increased property values with coordinated larger vision to reduce fear of piecemeal pioneering.

- Increased development flexibility and easier approval process for compliant development plans.
- Increased tax base needed to support county services.
- Decreased traffic generated relative to a similar amount of conventional suburban development.
- Mitigations and solutions to periodic Pulaski Highway congestion.

PROCESS AND STATUS:

This report is the second phase of a multi-phase process underway by the Baltimore County Office of Planning started in 2009, and projected to be completed in 2011 as the adjacent chart illustrates.

This phase of the planning effort included transportation feasibility studies, community support assessment (i.e. stakeholder process) and compilation of mapping database. These items informed current planning efforts and will provide material for a planned County/Community Charrette/workshop to be held in the third phase next year.

During the Third phase the County, with the participation of property owners and the community, intends to adopt a physical framework plan, new overlay zone and associated regulatory changes to create this envisioned district.

Figure 2 - Five phase redevelopment process



BACKGROUND

A previous study done in 2009 assessed the County's entire 12-mile section of Pulaski Highway to determine where best to start repositioning the highway as part of the emerging science and security corridor discussed below. That first phase study recommended that the County focus redevelopment planning on a 3 mile section of Pulaski Highway between Martin Boulevard and Reams Road, and a beautification and branding effort on a five-mile section between I-695 and Ebenezer Road.

The Phase 1 study determined that a well-planned redevelopment initiative here is economically feasible and would be significantly more beneficial to Baltimore County than development under the current zoning. Further, redevelopment should be created as a mixed-use employment-oriented district and an attractive boulevard treatment along the highway.

The Phase 1 plan identified a vision for a complete community with a more sustainable form of development; it developed an initial concept for land use and road networks; and assessed the ability for the real estate market to absorb the estimated development program and the district's market niche/role in the larger community. The study recommended a course of action for the County, State, and private sector. These recommendations were presented to County Executive Jim Smith who authorized staff to move to Phase 2.

FUNDING SOURCE AND GOALS

Both the Phase 1 and Phase 2 studies have been funded by the Chesapeake Science and Security Corridor Consortium. The Consortium's purpose is to help to implement the mission of the federal Base Realignment and Closure (BRAC) process at Aberdeen Proving Ground (APG). Through the BRAC process, APG is emerging as an important new regional technology center.

The Consortium is comprised of four Maryland jurisdictions and eight regional partners in three states. It supports the BRAC mission by planning for the necessary infrastructure, skilled workforce, and services to make APG's transition a success. The key Maryland jurisdictions—Baltimore City, Baltimore County, Harford County, and Cecil County—along with New Castle County, Delaware, are linked by Pulaski Highway. APG is located in Harford County.

The BRAC initiative will generate demand for additional office space and housing in the Pulaski Highway corridor over the next eight to twelve years. The Consortium's purpose in funding these studies is to help provide for appropriate development areas to accommodate BRAC-related growth. The study is also intended to provide a replicable model for similar redevelopment elsewhere in the corridor. It further offers a model for urban arterial redevelopment that supports federal sustainability and livability goals, recapturing the value of highly visible, accessible land along arterials as transportation convenience, cost and technology create new opportunities for transit-ready places.

ADDITIONAL COUNTY PROJECT GOALS

- Build on the larger effort to brand the Pulaski Highway Corridor so as to attract quality jobs to this section of the corridor.
- Create new prototypes, tools and processes for community scale revitalization efforts that enable the creation of complete communities that are more walkable, sustainable and supportable by transit.
- Begin implementing the goals and policies of the County's new Master Plan and the new Middle River Redevelopment Plan as this study represents one of nine districts defined within the Middle River Redevelopment Plan.

PHASE 2 PURPOSE AND SCOPE

This phase of the project focuses on further refining the plan and evaluating transportation and environmental feasibility as well as stakeholder interests and concerns. It prepares the County for the forthcoming community workshops by conducting investigations, collecting information and recommending a refined vision and plan of action for final plan preparation. Toward this end it included:

- A series of meetings to inform property owners and the community, to engage their interest and support for the project, and to identify issues and resolve problems where possible.
- An evaluation of low, medium and high development land use concepts and various transportation networks needed to support the district scenarios.
- Travel demand model and traffic operations analyses to estimate future vehicle travel demand assuming no change in growth patterns, and its associated traffic impacts and system needs under

the low, medium and high development scenarios under current assumptions about other growth in the region.

- Created base maps and visualizations to aid in detailed planning.
- The resulting deliverables of this Phase 2 analysis are described in this summary report and include:
- A refined district concept, vision and plan elements that identify the key issues to be resolved during Phase Three.
- A description of the next step processes to be used by the county to complete the plan.
- A proposed process that can be applied elsewhere in the county and along the Chesapeake Science and Security Corridor.
- A separate technical report providing Baltimore County transportation staff with detailed discussions and analysis results of the travel demand model and operations analyses.

SCENARIO DEVELOPMENT & ANALYSIS

The following section describes the land use and transportation analysis tasks and the methodology used for these tasks.

DISTRICT CONCEPTS & SCENARIOS

The team developed and analyzed several district land use and transportation scenarios in Phase 2. All of these represent various levels of growth that might occur over the next 25 years. The scenarios seek to bracket the scale of development and the associated traffic impacts and improvements. Some were selected to aid the community in understanding possible growth in the region and the district. Some were selected to define the point at which new road improvements might be needed. The twenty-five year horizon was selected for Phase 2 work so that all land use and traffic scenarios compare the same year.

All of the scenarios and traffic studies completed in this phase and documented elsewhere in this report and the Transportation Report utilize the Baltimore Metropolitan Council (BMC) regional travel demand model projections of traffic volumes and roadway capacity additions. Major projects in and near the study area that are included in the 2035 regional travel demand model include the extension of Campbell Boulevard to White Marsh Boulevard and the addition of express toll lanes on I-95.

None of the scenarios attempt to quantify the theoretical amount of development that current zoning would permit because this amount of growth is not considered achievable under current conditions. Area lot sizes and shapes, ownership patterns, regulations and market perceptions all work to greatly reduce the growth potential. The current zoning categories already permit high densities of employment uses and tall buildings. If the area were actually built to these densities it would result in far more growth than any of the scenarios tested. However, zoning rules also require deep setbacks from property lines, forest conservation and other site consuming features. The businesses that have been coming to the area are most suited to one story buildings and surface parking lots. Thus individual property owners have been electing to build at very low densities. **A significant change or transformation is needed to overcome these limitations and attract the type and quality of growth envisioned.**

It is important to note that the projections prepared in Phase 1 looked at various build-out horizons based on market absorption rates. Phase 2 numbers estimate district progress at 25 years, BMC's time horizon. As a result there are differences between Phase 1 and Phase 2 projection numbers.

For Phase 2 four numbered scenarios were developed. From these several additional lettered sub-scenarios were created to address questions that arose during analysis. Scenarios divide into two groups. The 'Business-as-Usual' scenarios assume that growth will occur as it has in the past, using current development rules and without any property owner coordination. The second group represents a range of 'transformative' scenarios. They assume that the County, State and property owners will choose to work together to transform the area under new rules and that the area will be perceived and used in new ways. The land use assumptions for the various land use scenarios are described in the land use analysis section. The road connections assumptions are described in the traffic analysis section.

The scenarios and their titles as discussed - through out the report are as follows:

'BUSINESS AS USUAL' (NO ACTION) SCENARIOS:

Scenario 1: This scenario represents the current official baseline for growth. It shows the amount of growth that has been projected by the County for the district and the County as a whole as well. It also shows the planned public and private road improvements projected to occur. This scenario takes into account approved development in the area that is yet to be built as of January 2010. These growth projections and roads are part of the BMC's Round 7C regional travel demand model. By using this model future local and through traffic growth can both be studied.

SCENARIO 1-A: This is a refined version of Scenario 1 updated for application in this project. It assumes the same district growth as Scenario 1 and adds some nearby growth and road improvements that are assumed to occur as part of the initial phases of the nearby planned unit development (PUD) called Nottingham Ridge. The current regional travel demand model does not account for this recent PUD approval. This scenario was tested in the transportation analysis.

Scenario 1-B: This scenario represents the amount of growth that the Phase 1 market & economic analysis estimated might occur in the district given current ownership patterns, regulations, market perceptions

and market absorption rates for the expected land use types. Its land use amounts are somewhat higher than the County's official estimate. This scenario was not modeled for the transportation analysis.

Transformative Scenarios 2, 3, & 4: Three transformative land use scenarios were developed. These are numbered 2, 3 & 4 respectively and they compare low, middle and high intensity levels of redevelopment. All three assume creation of the same local street network within the district but no other major road additions in or out of the district beyond those already called for in the BMC baseline and the Nottingham PUD plans. All transformative scenarios also include the BMC growth for the region and the nearby areas as assumed in Scenario 1-A.

SCENARIOS 4A&B: From these scenarios the team developed two sub-scenarios, to help assess the need for major new road improvements. 4A assumes two new bridges are built to create connection across the CSX rail line and 4B assumes no new bridges are built.

LAND USE GROWTH SCENARIOS

The amount of growth projected for the possible future land use scenarios is shown in Table 1. Table 1 also quantifies the amount of pre-existing development already in the area. As reported on Maryland Property View data, the district currently contains 2,300,000 square feet of non-residential development and 374 residential housing units (486,000 square feet).

As noted, Scenario 1 and Scenario 1-B represent projected future land uses under the current zoning and given current market perceptions of the area. Scenarios 2, 3 and 4 represent possible amounts of growth assuming a transformative approach is taken. The three scenarios envision a walkable mixed use district of increasing densities. Among the three scenarios, only scenario 2 has been assessed for market feasibility. In phase 1 this scenario was deemed to be feasible, and considered a conservative estimate of the district's growth potential over a 20-year time horizon. The estimate was based on assumptions as to the community's acceptance of certain residential development types and densities, the likely demand for office uses, the appropriate amount and type of new retail and the number of sites that might redevelop. The other scenarios which represent more intensive development over a 25-year horizon were created in phase 2 to assess the transportation impacts of increased growth and development in the corridor. (The 25-year horizon allowed for comparisons

with other regional transportation data.) A new market analysis was not part of the scope of phase 2, but it is assumed that development exceeding scenario 2 levels can be achieved within the 25 year time frame over time through greater interventions that alter phase 1 assumptions, an improved regional economy, or a combination of these factors.

All of the transformative scenarios assume that key obstacles to change are removed and key catalyst actions are taken. Assumptions include new zoning, new development rules, timely improvements to key roads and a series of significant image changes. Additional scenario specific assumptions are also made to define what steps might be needed to bring about increasing amounts of growth. In developing these scenarios the team took into consideration market absorption rates, approved development plans, the amount of vacant developable land as well as land not developable due to environmental constraints. They considered the likelihood of current land uses to remain unchanged as well as the likelihood of renovation, infill and redevelopment over the next 25 years. The three transformative scenarios are not mutually exclusive alternatives; they offer visions of the future based on how fast growth might come and change induced within the 25 year time horizon.

The three alternative transformative land use scenarios envision low, medium and high degrees of redevelopment and infill in the district. These three reflect several variables:

- low, medium and high extent of land area is built on,
- low medium to high amounts of the land assemblage occurs so that more efficient mixed-use forms of development are built,
- low, medium and high amounts of new development occurs,
- increasing densities and intensity of development types with taller building heights and increasing use of garage and structured parking,
- low, medium and high replacements of current buildings with higher density uses, and
- high, medium and low amounts of low density flex-space/industrial/warehouse uses within the non-residential land use category with corresponding increases of office and retail uses in the mix.

The scenarios shown on Table 1 are defined in terms of total district future size and include both estimated

amounts of new development and pre-existing development to remain. Development is divided into the land use categories of: office, flex/industrial, retail and residential. All development – both residential and non-residential is described in terms of the amount of square feet of building built so that it can be measured independently from the uses within buildings. This is important when mixed use buildings are envisioned. For the purpose of translating residential development into numbers of residential units the chart assumes an average household size of 1,300 square feet. To aid in comparing the amount of growth each transformative scenario might bring, each one is compared to the two “business as usual” scenarios.

1. “Extension” of Campbell Boulevard from Pulaski Highway to White Marsh Boulevard with a new Mohrs Lane Bridge restoring the road crossing over the CSX rail line,
2. Transverse Avenue / Bird River Road is completed from Martins Boulevard to Ebenezer Road,
3. Philadelphia Road is widened to four lanes between Rossville Boulevard and Campbell Boulevard,
4. Addition of two express toll lanes in each direction on I-95 from I-895 to Aberdeen,
5. No new transit service in this part of the County, and
6. Improvements to Pulaski Highway only at the Mohrs Lane intersection.

KEY SCENARIO ASSUMPTIONS:

SCENARIO 1 & 1-A BASELINE FUTURE: The land use amounts shown for the district were taken directly from the BMC traffic model. They reflect the County’s official projections of growth after 25 years. Likewise the road improvements assumed to be in place within the district and area are taken from the BMC travel demand model. No new local streets are assumed to be added by developers. The improvements assumed are identified in the county or state capital improvement programs. Baseline Future transportation improvement assumptions include the following:

SCENARIO 1-B MARKET ESTIMATE: This is the Phase 1 team’s judgment of a likely Business-as- Usual scenario. It assumes no redevelopment of currently built sites. It adds to existing conditions new growth based on current zoning and current market demand. This scenario assumes that the district developments that are now approved but are yet to be built will be built as approved. For Scenario 1 the total increase in land use is projected to be nearly 3,600,000 square feet. This growth projection envisions that the current conventional employment district pattern continues and that new development is largely warehouse- and

Land Use Categories	Existing Condition		Business as Usual Scenarios			
	Square feet	%	Future Baseline Scenario 1&1-A		Market Estimate Scenario 1-B	
			Square feet	%	Square feet	%
Pre-existing Non-Residential SF. **	2,300,000	83%	2,300,000		2,300,000	
New Non-Residential			241,600		3,396,877	
Office			73,150	18%	687,377	19%
Flex/ Industrial			85,200	21%	2,709,500	75%
Retail*			83,250	21%		
Pre-Existing Residential	486,200	17%	486,200		486,200	
New Residential			154,700	39%	198,900	6%
Civic			-			
Total New Development			396,300		3,595,777	
New District Total S.F.	2,786,200		3,182,500		6,381,977	
Total existing households	374		374		374	
Total new households			119		153	
Total households	374		493		527	
% increase over Future Baseline Scenario			100%			
% increase over Market Scenario					100%	

manufacturing-oriented. The growth projection is divided into office (687,377 square feet), flex/industrial (2,709,500 square feet), and 153 new residential units (198,900 square feet). Scenario 1 projects a total new and existing development of just over 6,300,000 square feet. The resulting balance of land uses in the new growth is estimated to be 94% employment (of this 20% is office and 80% in industrial or flex space) 6% residential and 0% community oriented retail.

As noted in a Phase 1 Market analysis by Lipman, Frizzell & Mitchell, LLC, build out will be slow if changes are not made to current zoning, the area’s image or its road network. Complete build out of the area’s growth capacity using this approach might take 35 years or more because other areas of Middle River are better positioned to serve this need.

SCENARIO 2 – LOW INTENSITY REDEVELOPMENT

Scenario 2 reflects twenty-five years of growth using the market based analysis for a mixed use district as prepared by Lipman, Frizzell & Mitchell, LLC during the Phase 1 study. Like Scenario 1A, Scenario 2 assumes no redevelopment of currently built sites. The total new development the district can expect to capture is in excess of 4,500,000 square feet. This growth projection is divided into office (838,000 square feet), flex /

industrial (1,090,000 square feet), retail (151,000 square feet), and 1,891 new residential units (2,458,800 square feet). This brings the new and existing development totals for Scenario 2 to just over 7,300,000 square feet. Other Scenario 2 assumptions are as follows:

1. Pulaski Highway is visually improved per State and County plans for a multimodal urban boulevard and rebranded with improvements at key intersections.
2. Yellow Brick Road is built from the ‘Constellation’ property through to Mohrs Lane.
3. Philadelphia Road is visually and functionally improved, but remains at one through lane in each direction between Rossville Boulevard and Mohrs Lane except at some intersections. (Scenario 1 and the regional travel demand model assume Philadelphia Road is widened, but the project team feels this is undesirable for the character of the redevelopment area).
4. A local street network is created in the district for increased connectivity and access to Pulaski Highway. New and existing street designs accommodate pedestrians and bikers
5. The local circulator bus routes continue and are enhanced as the local street grid is improved.
6. New zoning tools can be adopted that reduce setback and allow land development projects to use

Transformative Scenarios					
LOW Scenario 2		MEDIUM Scenario 3		HIGH Scenario 4, A&B	
Square feet	%	Square feet	%	Square feet	%
2,300,000		1,650,000		1,000,000	
2,079,000		5,010,000		6,100,000	
838,000	18%	2,300,000	27%	2,800,000	25%
1,090,000	24%	2,300,000	25%	2,800,000	25%
151,000	3%	410,000	5%	500,000	5%
486,200		486,200		486,200	
2,458,800	54%	3,658,200	42%	5,000,000	45%
4,537,800		8,668,200		11,100,000	
7,324,000		10,804,400		12,100,000	
374		374		374	
1,891		2,814		3,472	
2,265		3,188		3,846	
230%		339%		380%	
115%		169%		190%	

Notes

* Retail includes hotels, restaurants & conference centers
 ** uses of pre-existing non-residential square footage are not defined
 Residential SF assumes an average of 1300 sf per unit

These scenarios compare possible district growth scenarios over the next 25 years for the purpose of testing transportation capacity and community acceptance
 They are not intended to indicate eventual full build-out of the district.

No scenario is offered for current zoning capacity as current zoning would theoretically allow a much larger amount of development than any of the above scenarios and those amounts are not considered feasible, marketable or practical in the foreseeable future.

Scenarios 1 and 1A based on 2035 BMC Model

cooperative solutions for parking, loading, signs, schools, and other common problems burdening development projects.

7. Within the district, certain internal transportation issues and environmental constraints can be resolved among owners and with the County. In particular, agreements allowing some internal or parcel to parcel connectivity and joint storm water management solutions should occur. Offsite forest conservation easements should be allowed. These will increase the buildable area and thus potential development yields.
8. Surface parking can fulfill most if not all of the parking needs, and is located in support of walkable streets.
9. Most new buildings range from one to three stories in height.
10. Approximately 56% of the land area (480 acres) is available for new development, and all existing buildings stay in place.
11. Single family and townhouse will be the dominant housing type introduced, with some good quality multi-family units, if market conditions at time of development allow.
12. Light industrial and R&D or uses in one and two story buildings are still the dominant employment type but the office component is growing.
13. The district becomes more walkable, livable and is rebranded as a quality business address.
14. The balanced mixed-use approach is assumed for new growth of 42% employment (of this 40% is office & 60 % in industrial or flex space) 54% residential and 3 % community oriented retail.
15. Assuming higher job densities as being typical in office buildings, the quantity of jobs created is assumed to be greater in Scenario 2 than in Scenario 1 despite the smaller amount of employment square footage. The larger amount of industrial space estimated in Scenario 1 is assumed to create fewer jobs for square foot of built space.

SCENARIO 3 – MEDIUM INTENSITY REDEVELOPMENT

This scenario assumes that more growth can be captured in the study area over the next twenty-five years than estimated in Scenario 2 because additional actions are taken that will improve the area's desirability, and more land owners choose to make a change. The total new development the district in this projection is in excess of 8,600,000 square feet. This growth projection is made up of office (2,300,000 square feet), flex /industrial (2,300,000 square feet), retail (410,000 square feet), and 2,814 new residential units (3,658,200 square

feet). This brings the existing and new development totals for Scenario 3 to just over 10,800,000 square feet. This scenario assumes that the 374 existing housing units remain and that most (1,650,000 square feet) of the existing non-residential development remains. Scenario 3 assumes that in addition to all the conditions listed for Scenario 2, added changes happen so that development can advance beyond the market-based thresholds proposed in Scenario 2:

1. More property owners in the study area elect to combine land or to find the cooperative solutions to streets and development than envisioned in Scenario 2. More master planned mixed-use developments are undertaken by developers who help to change the area's image and reputation.
2. Surface parking can fulfill some of the parking needs but garages, simple parking decks and multi-level parking garages will be created for some sites.
3. On-street parking is possible on many streets.
4. The district becomes more walkable and livable. It has a name and is rebranded and marketed in the region as a new place.
5. In addition to a local circulator, commuter bus service on Pulaski Highway becomes available.
6. Most new buildings are between 3 and 5 stories.
7. As densities rise, more owners elect to redevelop older low density properties. Redevelopment of 28% or 650,000 square feet of existing non-residential buildings occurs.
8. Good quality multi-family housing will emerge as a significant housing type. Flex space and office space occur in almost equal amounts.
9. Land values have begun to rise, significantly, making structured parking solutions possible.
10. More residential units and retail uses are allowed in addition to employment uses. More office type uses are attracted so that the balance of land uses shifts to 52% employment (of this 27% is office & 25% is flex space), 42% residential, and 5 % community-oriented retail.

SCENARIO 4 - HIGH INTENSITY REDEVELOPMENT

In Scenario 4, a more urban style village district is envisioned to be achievable within twenty five years. The total development in the district is in excess of 7,300,000 square feet. This growth projection is divided into office (2,800,000 square feet), flex / industrial (2,800,000 square feet), retail (500,000 square feet), and approximately 3,472 new residential units (4,513,600 square feet). This brings the new and existing development totals for Scenario 4 to just over

12,000,000 square feet. (Note: this includes 374 existing housing units and 1,000,000 square feet of existing non-residential development from Scenario 1.) Other assumptions made for Scenario 4 before development can advance beyond the thresholds proposed in

Scenarios 2 and 3 are as follows:

1. Significant assembly of smaller parcels occurs and master planned mixed use developments are undertaken by developers who aggressively work to change the area's image and reputation.
2. Surface parking fulfills some of the parking needs but a significant amount of parking occurs in multi-level parking garages.
3. Increasing transit services include a local circulator service with regular connections to the Martin State Airport (MSA) MARC Station and Bus Rapid Transit or enhanced commuter bus service operates in the corridor. (Note: These are not assumed for traffic purposes, they are recommended for marketing purposes. Traffic analysis assumes the availability of transit but not specific routes or services)
4. Most new buildings are 5 stories or above, again with good quality multi-family housing as the dominant new housing type. The employment type is split between offices and flex space
5. Land values have begun to rise significantly; making high rise development structured parking solutions possible.
6. This scenario assumes the redevelopment of 56% or 1,300,000 square feet existing non-residential buildings. It assumes some of the unbuilt approved development plans area redesigned for higher intensity use.
7. Land consuming low density development and redevelopment projects are either avoided or are rebuilt within the 25 year horizon.
8. The balanced mixed-use approach assumed for new growth of 50% employment (of this 50% is office & 50% is flex space) 45% residential and 5 % community oriented retail

TRANSPORTATION CONSIDERATIONS

During this phase of the study, the low, medium and high land use concepts were tested with possible transportation network scenarios to determine feasibility of redevelopment. The purpose of the transportation analysis was to identify the roadway and transit system needed to support the various development scenarios, allowing the County to undertake longer term planning and capital improvement programming.

The transportation analysis also included evaluating existing and future conditions for pedestrian, bicycle, and transit facilities. The purpose of the pedestrian, bicycle, and transit evaluation was to identify gaps and conditions for those users in the system which if corrected would lead to improvements in the long-term livability and active transportation options in the study area.

The transportation network assumptions focused on developing an interconnected or grid street pattern as this type of network would give people in the district flexibility and choice for selecting modes of transportation and routes of travel within the district. This more complete system would bring about improved livability within the district, reduced reliance on single occupant vehicles, greater opportunity for active transportation, and benefits to the environment in the form of reduced single occupant vehicle travel.

The type of interconnected network being considered in this district is shown conceptually in the Figure 3. This conceptual network provides opportunities for trips between district destinations to be made without using the arterial street; opportunities for active travel on lower volume, lower speed streets; and opportunities for a greater mix of land uses within close proximity of each other.

Figure 3 - Interconnected Road Network



EXISTING AND FUTURE BASELINE

To conduct the traffic operations analyses an existing conditions and future baseline analysis (Scenario 1A) was conducted as a point of reference. All analyses are weekday p.m. peak hour traffic operations analyses. The future baseline analysis is a 25-year forecast analysis assuming growth in the area consistent with the land uses and transportation system currently considered in the Baltimore Metropolitan Council (BMC) regional travel demand model (Scenario 1 as previously described), plus one recently approved project. The recently approved project is Nottingham Ridge, a development south of White Marsh Boulevard between I-95 and Philadelphia Road. This project was added to the model and incorporated into baseline analysis at the request of county staff. The land uses currently considered in the BMC model are those provided by Baltimore County during the Round 7C forecasts in summer 2010. Nottingham Ridge had not been approved at that time, which made it necessary to manually add it into the travel demand model to incorporate it in the baseline analysis.

The transportation network in the 2035 BMC model is based on roadway projects identified in State and County capital improvement programs. Notable projects affecting the study area included in the BMC transportation future baseline network are:

- Widening of Philadelphia Road to four lanes between Rossville Boulevard and Campbell Boulevard
- “Extension” of Campbell Boulevard from Pulaski Highway to White Marsh Boulevard
- Addition of two express toll lanes in each direction on I-95 from I-895 to Aberdeen

The 2035 BMC model does not have any added transit service in this part of the Baltimore region. Other specifics of the transportation network assumptions included in the BMC regional travel demand model are included in the Transportation Report.

The results of the p.m. peak hour Scenario 1A: Future Baseline analysis are shown in Figure 4. These results demonstrate congestion in the corridor will increase substantially by 2035 without any district redevelopment efforts. Four intersections on Pulaski Highway alone will experience failing level of service

and operate over capacity. Philadelphia Road, except at Campbell Boulevard, will operate acceptably due to the addition of a second lane in each direction. Causes of this congestion include increased through volumes on Pulaski Highway and trips generated by the Nottingham Ridge development on Philadelphia Road between Campbell Boulevard and White Marsh Boulevard. On Pulaski Highway under Scenario 1 Future Baseline conditions, the BMC model projects that the westbound evening peak period through volumes more than double and the eastbound evening peak period through volume increases 30 to 50 percent.

Figure 4 - 2035 Scenerio 1A (BMC base model + Nottingham Ridge Development



- Project Boundaries
- Transportation Influence Area
- New Roadway
- Level of Service A-D
- Level of Service E
- Level of Service F
- CM = Critical Movement (for unsignalized intersection)
- v/c = Volume-to-Capacity Ratio (for signalized intersections)

TRAFFIC OPERATIONS IN THE DEVELOPMENT CONCEPTS

Figure 5 shows the number of households and jobs forecast for the district under the low, medium and high redevelopment land use scenarios described in the previous section as compared to the BMC future baseline development scenario. As shown in Figure 5, the BMC scenario for the area calls for little growth between now and 2035. Scenario 2 substantially increases employment and population within the district. Scenarios 3 and 4 are similar to one another, and both substantially increase employment and population relative to Scenario 2.

Three forecast land use and transportation networks were tested in the regional travel demand model. Rather than test both Scenario 3 and Scenario 4 land use, it was deemed more beneficial to test Scenario 4 land use with different road networks. The analyzed scenarios were identified as:

- Scenario 2 – low land use redevelopment and the secondary interconnected network constructed. The secondary network is shown in Figure 6. Key aspects of this network include extending Yellow Brick Road to Mohrs Lane, connecting Bird River Road from Middle River Road to Martin Boulevard (via Transverse Avenue), and generally creating a grid in the area.
- Scenario 4A – high land use redevelopment, the secondary network and two additional crossing of the CSX railroad: one created between Middle River Road and Mohrs Lane, and one created by extending King Avenue to Pulaski Highway
- Scenario 4B – high land use redevelopment, the secondary network, and no new CSX crossing. This is the land use of Scenario 4A with the road network of Scenario 2. This scenario was modeled to assess the magnitude of the need for new crossings of the CSX railroad with high land use redevelopment.

Figure 5 - Population and Employment Totals in Study Area

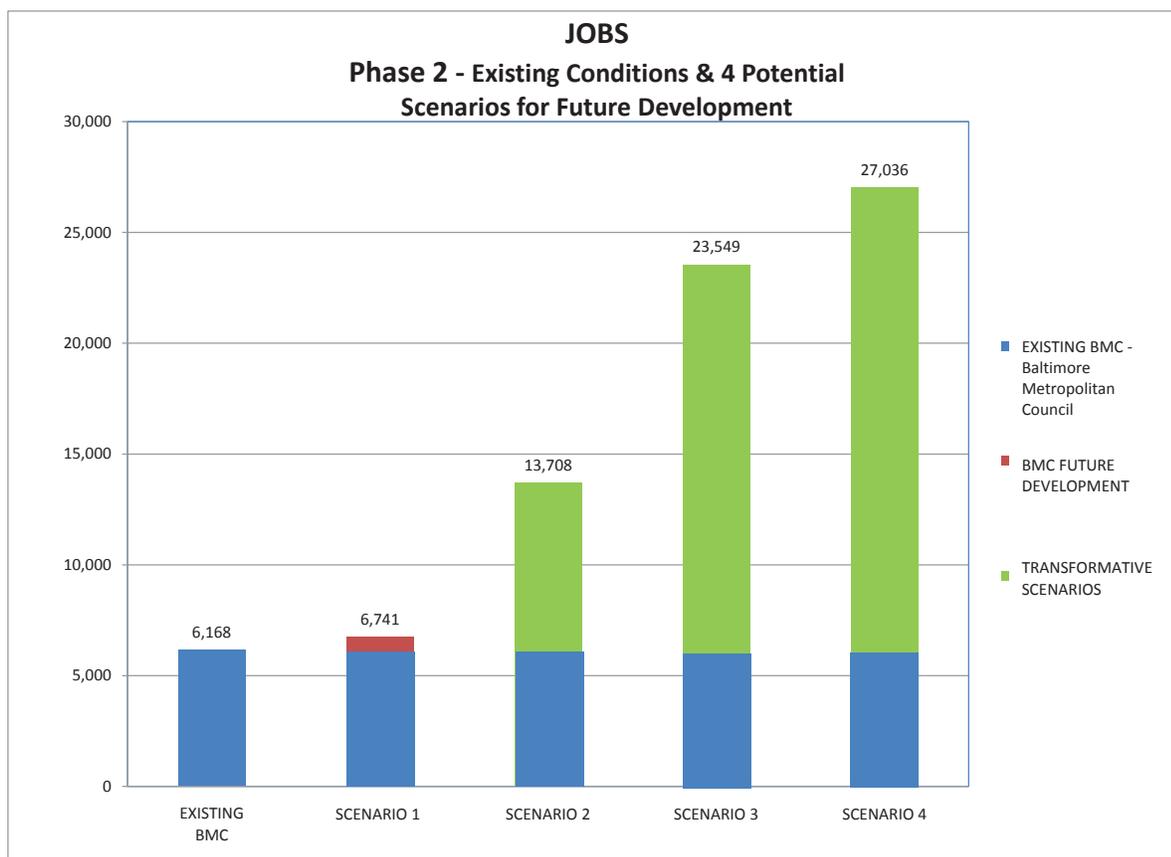
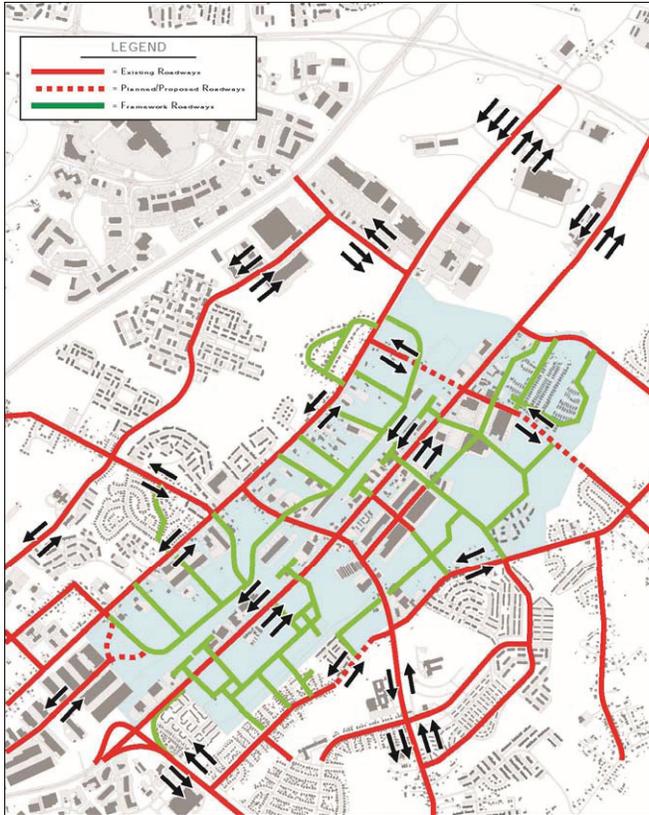


Figure 6 - Proposed Secondary Interconnected Network Without Additional Crossings of CSX Railroad.



The low and high land use concepts and associated transportation networks were input into the regional travel demand model. Subsequently to account for the anticipated benefits of the mix of land uses and the interconnected roadway system, the outputs from the model were post-processed using the results of recent research on the travel demand characteristics of walkable places led by Robert Cervero and Reid Ewing. In its simplest form, this research shows that as density, diversity and design increase the number of vehicle miles of travel in an area decreases. In this research:

- Density is the number of people per acre that are living and working in an area. As this number increases residential supporting land uses such as retail services and employment become more likely and also increase.
- Diversity is the mix of land use per acre (i.e. residential, commercial and retail). The greater the mix of land uses per acre, the greater the opportunity for shorter non-auto trips by people living or working in the area.
- Design is represented by the number of side street intersection legs in the area, reflecting urban versus suburban development patterns. As this number increases the degree of interconnectivity of the network increases and the greater the opportunity for local trips on local roadways, or pedestrian or bicycle trips on lower volume, lower speed streets. By counting side street intersection legs, a four-leg intersections is considered to offer twice the connectivity benefit of a three-leg intersection

The detail of how each of these attributes is accounted for in the resulting future travel demand is explained in the Transportation Report. However, consistent with their research it was found that as density, diversity, and design increased (i.e. as the district grew toward the Scenario 4 development and road network level) the p.m. peak hour traffic volumes did not grow at a commensurate rate. This was especially true in the heart of the redevelopment district, such as at the Pulaski Highway/Middle River Road intersection. The total number of vehicles projected to enter this intersection, and the Pulaski Highway/Rossville Boulevard intersection during the p.m. peak hour is shown in Table 2.

Table 2 P.M. Peak Hour Total Entering Volume

Scenario	Pulaski Highway/Middle River Road	Pulaski Highway/Rossville Boulevard
Existing	4425	6455
2035 Scenario 1A (Baseline)	6035	8400
2035 Scenario 2 (Low-Intensity Redevelopment)	5160	8815
2035 Scenario 4A (High-Intensity Redevelopment and Two New CSX Crossings)	4380	8455
2035 Scenario 4B (High-Intensity Redevelopment and No New CSX Crossings)	4650	8530

Finally, a traffic operations analysis for Scenarios 2, 4A, and 4B was conducted using the volumes from the travel demand model and Synchro 7 software to analyze intersections. The detailed results of the analyses are presented in the Transportation Report.

KEY TRANSPORTATION FINDINGS

FUTURE ROAD SYSTEM:

- **TOGETHER, THE LOW LAND USE REDEVELOPMENT AND ROAD NETWORK ADDITIONS DO NOT DEGRADE TRAFFIC CONDITIONS WITHIN THE STUDY AREA RELATIVE TO THE FUTURE BASELINE CONDITION.**
- In Scenario 2 (the low land use re-development concept) the transportation network is forecast to maintain intersection levels of service essentially the same as traffic operations under Scenario 1A (Future Baseline). As discussed above, this can be attributed to the mix of land uses and the secondary network which relieves Pulaski Highway and some key intersections. The secondary network provides internal study area circulation options by extending and creating additional connection to Yellow Brick Road, Bird River Road and local streets in the project area
- **THE HIGH LAND USE SCENARIO WITH OR WITHOUT THE ADDITIONAL CSX CROSSINGS (I.E. BEYOND RE-OPENING MOHRS LANE) YIELDS TRAFFIC OPERATIONS IN THE STUDY AREA THAT ARE SIMILAR TO THOSE IN THE BUSINESS-AS-USUAL FUTURE BASELINE CONDITION.**
- The secondary network and the mix of land uses would allow residents and employees of the district options to travel by non-auto modes of transportation. Density, diversity, and design result in traffic conditions that are similar to, and in some cases superior to, the Baseline.
- **PHASING OF FUTURE DEVELOPMENT NEED NOT BE TIED TO A TIMELINE CONNECTED TO CONSTRUCTION OF ADDITIONAL CSX RAILROAD CROSSINGS (I.E. BEYOND RE-OPENING MOHRS LANE). THE VALUE OF THE ADDITIONAL RAILROAD CROSSINGS IS IMPROVED ACCESS AND CIRCULATION RATHER THAN CONGESTION RELIEF.**
- The high land use redevelopment scenario tested both with and without additional CSX crossings (Scenarios 4A and 4B, respectively) do not show a substantial degradation in level of service as compared to Future Baseline conditions (Scenario 1A). However, the crossings do provide benefits for local circulation, create opportunities to focus land use development, and create a manageable Pulaski Highway and opportunities for additional non-auto cross-district travel. The railroad crossings should be pursued for these benefits; however their absence should not be considered a barrier to development in the district.
- **THE MOST FEASIBLE ADDITIONAL CSX CROSSING (BEYOND RE-OPENING MOHRS LANE) IS APPROXIMATELY HALFWAY BETWEEN MIDDLE RIVER ROAD AND MOHRS LANE.**
- An additional CSX crossing created by extending King Avenue to Pulaski was investigated; though it was found to be less feasible based on limited elevation differences. Additionally, it would increase traffic volumes at the Philadelphia Road/King Avenue intersection and require it to be greatly expanded.
- **PHILADELPHIA ROAD COULD BE MAINTAINED AS A TWO LANE ROAD WITH ONE LANE IN EACH DIRECTION EXCEPT BETWEEN KING AVENUE AND MIDDLE RIVER ROAD. INTERSECTIONS COULD BE CONTROLLED WITH ROUNDABOUTS OR TRAFFIC SIGNALS.**
- The BMC model used in the Baseline scenario (Scenarios 1 and 1A) identifies Philadelphia Road as having two lanes in each direction in 2035. However, analysis conducted for this project found that a two- or three- (with two-way left-turn) lane section will be sufficient in the future except between King Avenue and Middle River Road. A four- or five-lane section will be needed here. On Philadelphia Road, roundabouts could be used to control intersections at Hospital Drive, King Avenue, Middle River Road, and Mohrs Lane. Partial two-lane roundabouts would be necessary.
- **IF CURRENT CONGESTION TOLERANCE LEVELS PREVAIL, SIGNALIZED INTERSECTIONS ON PULASKI HIGHWAY WILL HAVE TO BE SIZED TO ACCOMMODATE THE HIGHER FORECAST VOLUME OF VEHICLE AND MULTI-MODAL TRAVEL ALONG AND ACROSS PULASKI HIGHWAY.**
- Under the Future Baseline, and the redevelopment scenarios with the secondary network, intersections on Pulaski Highway will operate at

low levels of service. If forecast travel demand is to be accommodated according to existing congestion tolerance levels, the intersections will need additional capacity. (For example, White Marsh Town Center currently accepts LOS E, whereas development in the study area is required to meet LOS D.) Based on the heavy through volume, a continuous third through lane would offer the greatest capacity addition although turn-lanes to/from Pulaski Highway could be used as well. As an option, lower level of service standards could be adopted for the district. Even with travel demand management in the district, this would mean more peak hour congestion, due to the broader development pattern.

- **THE CROSS-SECTIONAL ELEMENTS OF STREETS IN THE DISTRICT SHOULD REINFORCE LAND USE CONTEXT AND THE DESIRED MODE PRIORITY (OR BALANCE) FOR THE STREET.**
- Baltimore County should adjust its street design guidelines to ensure that the mobility and mode priority balance can be achieved as redevelopment occurs. For example, streets that have retail land uses should include cross-sectional elements that promote retail activity: on-street parking, bicycle parking, seating and shade, slower travel speeds, transit access and waiting zones, and locations for truck deliveries.

FUTURE BICYCLE SYSTEM

The use of bicycles for transportation has become more popular, both locally and nationally. Its popularity is likely to increase, particularly where bicycle travel is made safe and convenient by an appropriate infrastructure. Today, the bicycle system in the district offers limited continuity. Pulaski Highway and a very short segment of Middle River Road have bike lanes inhibiting bicycle travel by all but the most daring rider. The Eastern County Bicycle Plan (shown in Figure 7) identifies extensive connectivity on existing major roads within and beyond the district. The majority of routes planned for the district are long-distance routes that pass through on major roadways.

As the district evolves, the bicycle system can begin to grow into a comprehensive and interconnected system linking residential and employment centers to activity centers in and around the area (White Marsh Mall, Martin State Airport Mall, Community College of Baltimore County, and Franklin Square Hospital).

Connectivity along the roadways should be a top priority integrating bike lanes or cycle paths and shared bicycle/motor-vehicle lanes (depended on vehicle speeds) within and beyond the district. The type of facility needed is sensitive to the anticipated cyclist along and across the facilities. While Pulaski Highway may be an appropriate facility for experienced cyclists, capable of maintaining high speeds and comfortable riding in high traffic zones, it will not likely be suitable for children, seniors, recreational or safety sensitive cyclists. Additional parallel routes will be needed, and should be requested, if bicycling is to become a viable and broadly acceptable travel option. Because so much of the study area will benefit from new development and redevelopment, it is possible to construct a well-designed secondary network in a relatively short time. This presents a real opportunity to create a completely bicycle-compatible transportation system in the study area and environs.

FUTURE TRANSIT SYSTEM

While the traffic study findings do not indicate that enhanced transit is required for the district to be successful, it is very desirable. The presence of transit and at the very least, a clear plan for it, will greatly aid in changing market perceptions and opportunities, as more businesses and households look for a range of transportation options in making location decisions. Planning for transit also suggests that transportation infrastructure is designed to permit the district to intensify over the longer term. A public commitment to such a long term strategy will be important in the early days of district transformation. The team recognizes that high frequency commuter service will require intensified development in locations beyond the study area to generate sufficient ridership. So this should be addressed by the county and state as additional districts along the corridor are planned and as revitalization efforts in the Middle River area are continued.

Future transit service within the district will need to serve shorter distance intra-district trips for shopping, recreation and jobs, as well as longer distance commuter trips to employment centers north and south along the Pulaski Highway corridor. Public and private, local and regional partners will have to commit to planning for and investing in a transit system that has frequent, convenient, reliable service. Partnering jurisdictions will also need to commit to transit-friendly walkable districts to create the necessary regional synergies between places for transit to be frequent enough to be attractive to a broad range of travel customers.

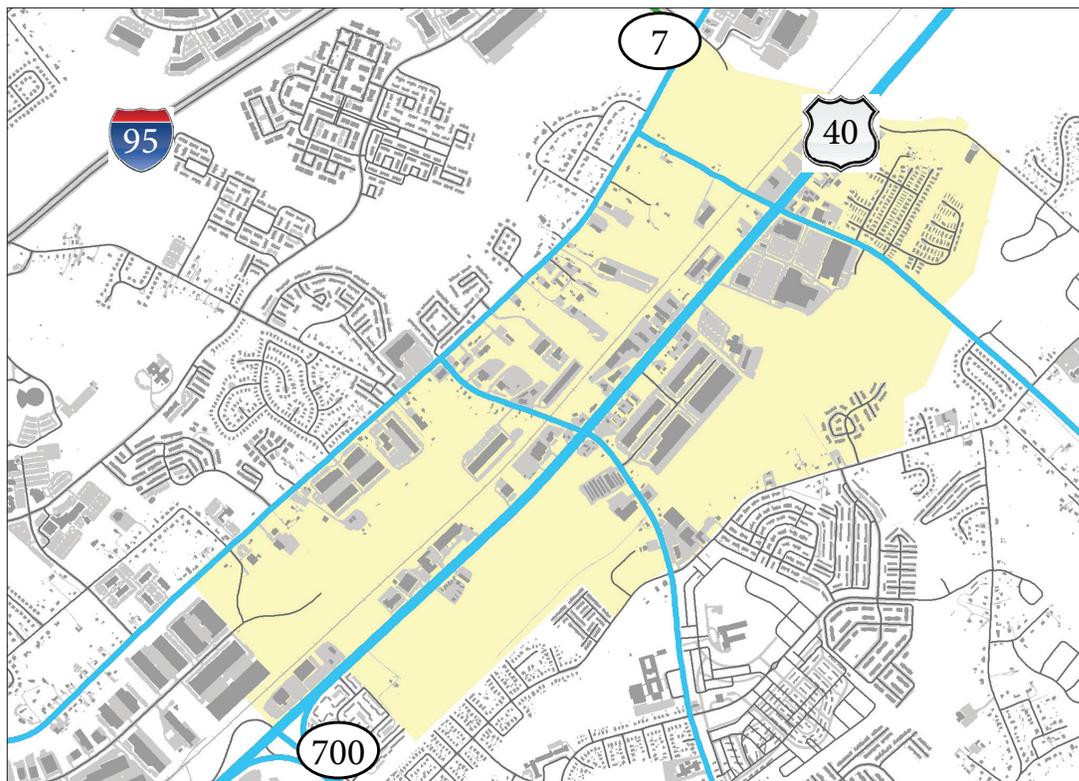
Providing this greater mobility will be accomplished incrementally, and designed in a way to coincide with redevelopment efforts. As properties begin to redevelop along the corridor, the County, working with State agency and neighboring jurisdiction partners, should develop a phasing plan that anticipates and identifies appropriate improvements to the transportation infrastructure that supports the walkable district vision. This could entail phasing-in enhanced transit service along Pulaski Highway and Philadelphia Road, as well new bike routes that feed destinations and transit stops with high quality service.

Additionally, incremental improvements to transit service could include the introduction of new QuickBus service with limited stops along the corridor, and enhanced peak hour commuter bus service. The existing QuickBus40 currently provides frequent bi-directional service along Eastern Avenue between Middle River and downtown Baltimore, while the #420 commuter bus currently serves peak hour commuters from Harford County who work in downtown Baltimore. Each of these services could be expanded, modified, or used as models for providing enhanced service to new destinations within the redevelopment district.

In addition, enhanced bus service could also provide better connectivity between destinations along the Pulaski Highway corridor in Baltimore and Harford Counties, particularly with increased BRAC-related activity at Aberdeen Proving Grounds. Other local bus service near the redevelopment district, including the #4 and #55 buses, could be re-designed to include stops within the district, once sufficient redevelopment has occurred.

A concept for further development as a long term corridor strategy is Bus Rapid Transit (BRT) or some other form of high capacity transit (e.g. streetcar or light-rail) on Pulaski Highway. While there is much to be studied to explore this concept; connecting right-of-way is available to accommodate it. Optimally a BRT option with a dedicated bus lane would not create an eight-lane section on Pulaski Highway, but would reassign lanes on the proposed six-lane section. However, the service could reduce the number of vehicle trips on the corridor and therefore relieve some congestion in the study area. Such service along the Pulaski Highway corridor could potentially interconnect with Baltimore City, Aberdeen, or other destinations along Pulaski Highway.

Figure 7 - 2006 Eastern Baltimore County Bicycle Access Plan



LEGEND: Bike Lanes

ENVIRONMENTAL/MAPPING

The results of the mapping activities revealed no new major obstacles to district development. Property owners, who wish to request entitlement approval for development as part of the Phase 3 process, should provide greater detail regarding their individual property conditions during Phase 3. Of particular concern is the need to achieve a better understanding of the location and limits of wetlands within the district. This will require field surveys and a more active commitment from property owners.

The goal of this task was to create a detailed and accurate district data base and base mapping that can be used in Phase 3 to help assess concept suitability, integrate physical constraints and inform decision-making. KCI staff prepared an enhanced GIS data base for the district with reconciled cadastral data and other features adding this area detail to the County GIS data base. A separate report provides an explanation of the data added and data sources used as well as the maps created.

The map on the following page shows environmental constraints currently known in the study area. Additional features mapping is included in the Project Geodatabase Requirements/Compilation Document

STAKEHOLDER PROCESS

A Stakeholder Involvement Process to inform property owners and the community about the project was conducted throughout Phase 2. The goal of the process was to engage interest, support and participation in the project, to identify common ground and issues to be addressed, to resolve problems early where possible and begin the process of building win-win solutions.

Target Audience: The outreach effort targeted several main audience groups:

- The 235 owners of District property
- Key community civic leaders/groups
- Residents, business owners & community participants in the immediate area
- County and state staff and officials

Contact Database: Two project lists were compiled to identify and contact stakeholders. One list included the property owners and businesses within the district boundary area and the second included community stakeholders in the larger study area such as: residents

abutting the district, area businesses, area civic community and HOA associations, business groups, key development professionals and county developers who have expressed interest or are already working in the area. Individuals not already on this list but who signed in at other Office of Planning meetings in the area were also included.

Contact data was collected using several different sources: lists available from the County, County staff interviews, Maryland Property View tax record data of property owner addresses, Google earth street images. Names were also added and corrected during the outreach process at outreach interviews and from sign-up sheets at meetings.

District Property Owners: TFG contacted district property owners by several methods including the methods listed below.

- Letters: Before the first community meeting a letter was sent to the 235 land owners found within the 850 acre area notifying them of the process, inviting them to the community meetings, asking them to call and offering a face to face meeting with TFG. Before the second public meeting a second notification letter was mailed to the district owners.
- Survey: A survey was sent at the same time asking owners about their plans, interests and concerns. 25 surveys, marked as being from district owners, were returned as of October 8, 2010.
- Property Owner contacts and meetings – Individuals were also contacted and interviewed at community meetings, on the phone and at one-on-one interviews.

Throughout, the purpose of the communication was to understand owner plans for their land over the next 25 years, to solicit their interest and agreement to participate in Phase 3, and to discuss their hopes and concerns regarding the district.

Key Community Leaders/Group Outreach: Community groups including the Essex Middle River (EMR) Civic Council and the Middle River Chamber of Commerce were also contacted for input. The Essex Middle River Civic Council meets monthly in the area. It serves as an umbrella organization to a larger number of area civic associations. Members had already voted to support the project based on an earlier presentation by the County Planning Director Pat Keller. They offered a number of

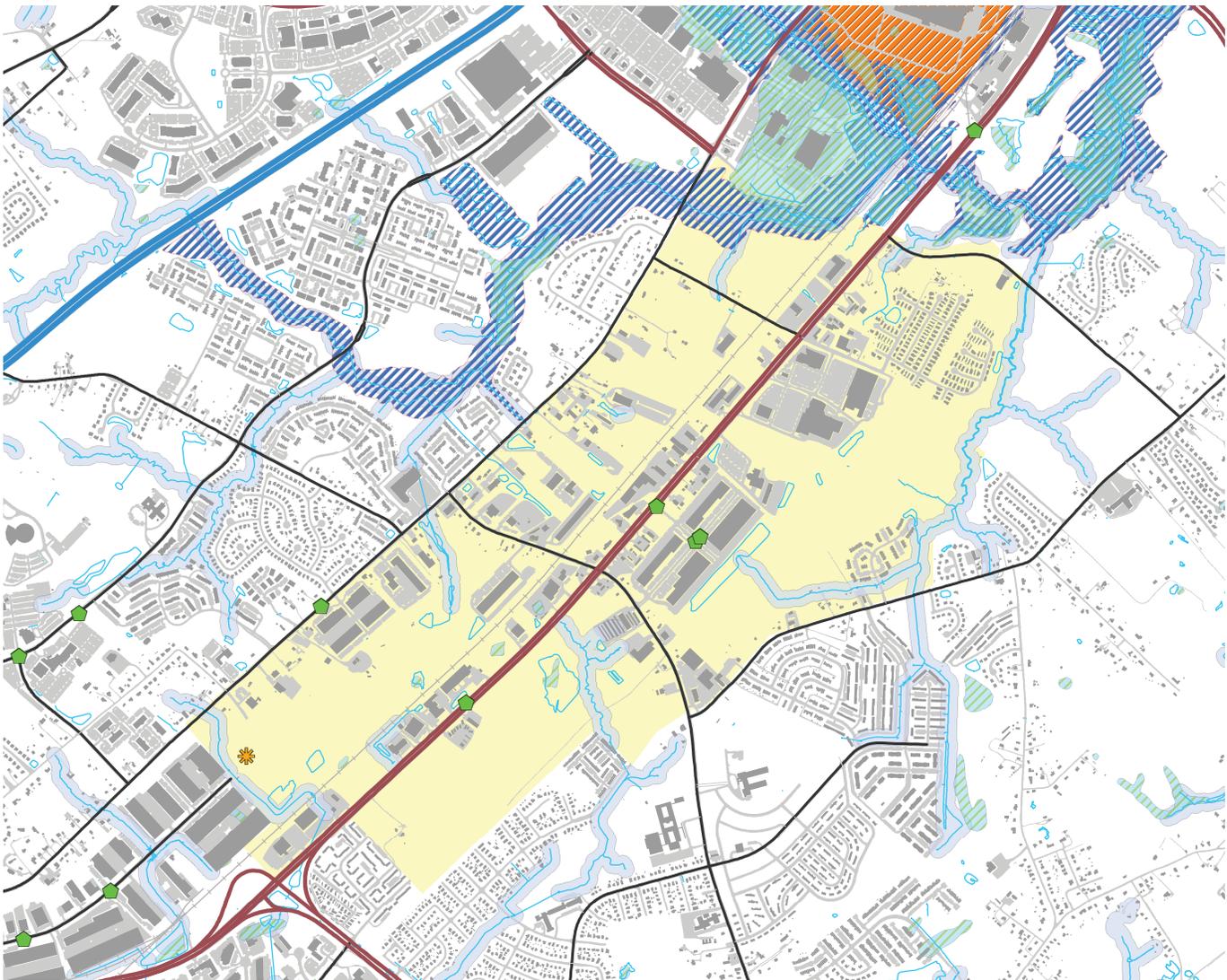
suggestions and cautions and asked that the project push forward toward developing and implementing the larger Middle River Redevelopment Plan.

Community Outreach: Input was also solicited from the community at large via 475 letters and surveys. The letter and survey provided information about the project, the upcoming community meetings and requested input on the project. We also emailed a letter and survey for further distribution to the EMR Civic Council, an umbrella organization of area associations, and the Pulaski Highway Business Association. Forty-five surveys were returned as of October 8th 2010. Of those returned, 16 were marked as being from nearby residents. Details of the survey results are included in the Confidential Stakeholder Findings Appendix.

Legend

-  Land_Restoration_Sites_HARN_83_Feet
-  Wetlands_HARN_83_FEET
-  100yrFloodPlain
-  StreamBuffer_100ft
-  Land_Restoration_Program_Areas__HARN_83_Feet

Figure 8 - Environmental Features



		Categories of Participants (majority viewpoints)					
		Citizen response at public meeting	Civic Associations	Property Owners	Business Owners	Developers	Survey (majority view)
General responses to surveys	What are the most important features to have in your community?	Traffic Schools			Public safety		Public safety
	Identify 3 community improvements or facilities you most hope that new development will provide.						Improved roads
	What aspects of any proposed new development are of most concern to you?	Paying for Development	Quality Jobs			Flexibility in use and design	Traffic
	How do you envision the Pulaski community (study area) changing in the next 20 years?						
	A - 3 existing community characteristics and/or features that should be preserved		preserve environmentally sensitive areas	flexible rules for property improvements	retail options		Maintain Jobs
	B - 3 existing community characteristics and/or features that should be eliminated						Eliminate blight
	C - 3 new characteristics Pulaski should be known for or features it should have						Quality Jobs
	What three other places most resemble what you want Pulaski to be in 20 years?	Towson		White Marsh Honeygo	Towson Columbia	Columbia	White Marsh
	How far do you travel to shop for food and weekly services/conveniences?	2 miles					2 to 3 miles
	How far do you travel to work?			6 to 10 miles			11 to 20 miles
	Where do you go for a major shopping trip	White Marsh					White Marsh
	What kinds of shops would you like to see in the Pulaski Community?	restaurants					restaurants
	Would you participate in Pulaski Community festivals or a 4th of July Parade?						yes
	What recreation facilities would you like to see in a new community park?						paved paths
	Do you live within the study area?						yes
Do you own property or a business in the study area?						yes	

		Categories of Participants (majority viewpoints)					
		Citizen response at public meeting	Civic Associations	Property Owners	Business Owners	Developers	
Interview responses to predetermined questions	What are your hopes?	improved life style	Better community	Higher property values	better business climate	entitlement of flexibility in use and design.	
	What are your fears?	loss of property rights	traffic and environmental losses		bad economic setting	changing rules	
	What do you hope to gain out of a workshop planning process?			I wish to maintain my development rights no down zoning	better business climate	entitlement	
	What can the county do to help development?	make the developers build the roads and schools	provide a good planning framework	build the roads		make the necessary improvements to allow our development	
	What is holding the area back?	over crowded schools	roads schools retail options		image	image	
	What should Pulaski hwy be?	should handle more traffic safely	should be nicer to look at	should be more accessible	need access	need access and capacity	
	Would a special tax benefit district be of value?	no	maybe	didn't understand these	yes	yes	
	What are the most pressing problem in the area?	crime, schools, traffic	schools and environmental problems	traffic	traffic	image	
	Would you invest further in this area?			yes	yes	yes	
	Do you think BRAC is a factor?	no	no	no	not seeing any evidence	not seeing any evidence	

KEY ISSUES AND FINDINGS

This section summarizes the key findings of this phase of study and sets out a refined district vision that reflects these findings. The team recommends that these materials be used to inform the next steps and serve as the basis of discussions to complete district planning with stakeholders. These findings support the two parallel, coordinated next-step efforts that are anticipated. One is a joint County/State effort to plan, design and build transportation and transit improvements on the district's State roads. A tentative set of recommendations is offered to serve as the basis of this effort. The second is the County's final step of developing the district framework plan with the participation of property owners & community. Two areas of findings are offered - Outreach Findings and Land Use/Transportation Findings.

OUTREACH FINDINGS

The team found considerable interest and guarded enthusiasm for possible new planning tools and the creation of a walkable mixed use employment district, based on conversations with the local community, businesses & property owners, and developers as well as with government staff. There is some skepticism that developers will elect to build the type of development envisioned in this part of the county due to its current physical appearance and reputation. The team identified numerous issues to be addressed pertaining to certain sites, blocks and topics. Based on the input received, we recommend that the following key findings and issues inform next steps to create a district plan capable of receiving broad consensus and investor interest.

KEY FINDINGS:

1. **INITIAL DISTRICT CATALISTS:** The greatest development interest appears to be near Mohrs Lane in response to the County's announced plans to build a new railroad crossing and road improvements. Other areas appear more likely to occur later, as needed road improvements will require cooperative planning among several owners, and some key owners have expressed a desire not to make changes in the near term.
2. **DEVELOPER INTEREST:** While no definite requests have been made at this time by developers ready to seek entitlement as part of Phase 3, there are interested sellers and buyers. Potential applicants appear to be seeking to assemble sites assessing the

potential for projects. The county should continue to work with owners and developers to encourage land assemblages and pre-planning investigations prior to the start of phase 3.

3. **FRAMEWORK CONCEPT ADJUSTMENTS:** Based on input from the transportation modeling and from certain affected property owners, several early adjustments to the street network concept have been made and are shown in this document (Figure 4). Additional alterations are expected during Phase 3. The team recommends planning the network alignments, widths and road ownerships on a block-by-block basis with the affected owners.

KEY PROPERTY OWNER CONCERNS

HOPES

- Wider land use choices and more density which could justify redevelopment of underutilized sites and older buildings
- Relief from current building setback requirements
- Coordinated offsite forest conversation
- Reservation of land for appropriately located and scaled new roads,
- Increased ability to attract buyers for land and get higher prices,
- Help with coordination of neighboring sites for small and long narrow lots to create more value.

CONCERNS

- Help to relocate underutilized site use, such as storage and contractor's yards elsewhere and sell land.
- Assurance of feasible relocation options that meet or improve business viability.
- Loss of developable land area to requested local road system and perception this will break up sites into less usable lots.

KEY COMMUNITY CONCERNS

CONCERNS

- Crime and safety protection
- Traffic congestion and danger – periodic gridlock on Pulaski.
- Keep jobs in the area
- Adequate quality schools at the time of development opening

HOPES

- Traffic relief and safety enhancements,
- Attractive walkable community village like environment
- Complete sidewalk and crosswalk connectivity in the short term
- Civic leaders

CONCERNS

- Traffic congestion – worsening of periodic gridlock on Pulaski Highway
- Adequate quality schools

HOPES

- Revitalizing the Middle River area
- More and better jobs sooner
- Help with traffic relief & gridlock on Pulaski
- Attractive walkable community village like environment with complete sidewalk network
- Quality community retail with nice restaurants, a new grocery store and other community-oriented shops
- School and road capacity in place at time of development

ISSUES TO BE ADDRESSED

1. **PULASKI HIGHWAY CONGESTION SOLUTIONS:** The community seeks assurances that the district will not cause congestion or constriction of Pulaski Highway and can help catalyze timely improvements. I-95 HOV lanes may help alleviate this in the future.
2. **SCHOOL CAPACITY:** The community seeks assurances that timely school capacity expansion will occur to support the added homes in the district as well in the other districts of the Middle River Redevelopment Area. If possible any new elementary school should be located in the district within walking distance of district residents.
3. **PARTICIPATION OPTIONS** – Land owners seek clarity regarding the degree of obligations that new rules will offer and/or impose upon all new and existing development in the district
4. **PROPERTY TAX POLICY:** Property owners ask that property tax values continue to be based on currently approved base zoning until owners opt into the district and trigger a review.
5. **APPROACH TO NEW STREET ROW:** Context sensitive Road designs that are scaled and enhanced to promote the integration of transit, street-front retail, bicycling and walking are desired. Concern

exists about who would build which facilities/roadways and whether or not they will be in place to support district development.

6. **IMPROVED DEVELOPMENT FLEXIBILITY/RULES:** Changes to current requirements in the zoning categories applied to the land in this district combined with changes to subdivision, forest conservation, road codes, building setbacks and permitted uses, are examples of the flexibility needed to promote development patterns more suited to creating a complete walkable community.
7. **NEW RULES** - Changes to the development review and approval process will be needed in the district. By-right approval for projects that are in full compliance and should be expedited. A process for community input on applications requesting refinements to /variations from the plan once approved.
8. **BOUNDARY REVIEW:** A proposed adjustment to district boundaries includes adding some and removing other parcels from the edges.

TRANSPORTATION/FINDINGS

- A well-planned walkable community redevelopment, at least as large as the Phase 1 recommendations if not larger, is supportable with reasonable transportation improvements in the near and long term.
- The recommended interconnected street network greatly aids in distributing traffic and reducing future congestion. Point loading of traffic moving through the district now concentrates at the intersection of Pulaski Highway and Middle River Road. The planned Mohrs Lane bridge opening and expected road upgrades will effectively double the area's traffic circulation capacity by creating a second railroad crossing.
- Due to the nature of travel behavior in a mixed-use walkable community, the type of development proposed would significantly reduce peak-hour traffic generation as compared to the same amount of growth built using current single-use zoning and urban design patterns. This is true even without significant improvement in transit service to the area.
- In the longer term (20-30 years), another bridge over the railroad tracks will be helpful and should be more precisely located during phase 3 to establish needed ROW. Its location should offer the potential for well-spaced intersections where multiple properties and existing development can be served. As the crossing is not essential to the

development of greater densities in the district, the location of intersecting streets to serve property access and reasonable pedestrian crossing/bus stop location spacing will be important.

- In no scenario does Bird River Road need to be widened. Due to regional traffic growth, some portions of Philadelphia Road will need to be widened sometime in the next 25 years. Added ROW would be needed for this and power lines may need to be undergrounded. In the nearer term, a proposed extension of Yellow Brick Road can serve as a reliever delaying a change to Philadelphia.
- The district uses and densities envisioned can be built without significantly enhancing transit Development projects in the area should be monitored so service planning for transit (both circulator and commuter bus) responds to make transit access and use a fundamental part of the development plan's transportation component. New or rerouted service might reasonably be arranged in the near term. In the longer term a regional premium transit service with higher frequency of service is recommended but is not now envisioned. Joint planning between the state and local land use partners will be needed to advance major transit projects. Once these are in place true transit-oriented development could occur. This should be permitted and encouraged.

FINDINGS FOR JOINT STATE-COUNTY PLANNING EFFORTS:

- The design timeline for Mohrs Lane expansion and Mohrs Lane bridge can now accommodate coordinated design so that the section can support district goals and demand. This may prevent the bridge from becoming a pinch point for traffic and obstacle to bike and foot traffic.
- An eastbound ramp to White Marsh Boulevard from Philadelphia Road will be needed before district build-out based on regional growth
- Pulaski Highway Design – Plans for installation of a lower speed urban style business boulevard treatment along Pulaski highway are needed now to help catalyze the district. This improvement can occur within the current Right-of-Way (ROW). A multi-way option may be beneficial to property owners on the narrow land strip between Pulaski Highway and the railroad tracks. To accommodate the projected regional growth in 2035, the highway will need one additional lane each way. This can also be built in the current ROW. Near

term improvements should be planned for these additions.

- The following concepts are recommended for Pulaski Highway and the County and State Highway Administration should create an agreement to ensure their implementation:
 - A Complete Street design should be created for the highway that creates lower speeds, maintains current traffic capacity and accommodates future capacity needs while creating an attractive urban-style boulevard with safe multi-modal features.
 - Plan for an ultimate street section that fits within existing 150' wide ROW & allows buildings to sit close to this ROW rather reserving another 50' on each side for additional widening
 - Plan for traffic signal progression, with signals added over time as warranted, to be spaced about every 1000 feet along the three-mile section of Pulaski Highway to significantly increase access to businesses along the corridor, and manage speeds at a moderate 35-mile-per-hour level to improve multi-modal safety.
 - Add a branded thematic landscape streetscape treatment with signs and plantings to mark district gateways and support lower travel speeds in this section.
 - Replace the jersey barriers with a 28' wide landscaped median with a storm water management (SWM) bio-retention function. A width of 2' or more to allow for raised pedestrian islands in combination with double left-turn lanes at some signalized intersections.
 - Add curb and gutters and attractive urban style SWM bio-retention along the road edge.
 - Restripe and revise the existing approximately 100' wide paved section where possible to add:
 - One additional 11' wide through lane each way sometime in next 25 years and consider converting this lane to HOV or a bus dedicated lane as part of a long-term corridor strategy.
 - A 6' buffered bike lane with 6' to 10' wide public sidewalks set beyond a landscaped buffer on each side of the boulevard.
 - Reduce the highway building setback to 5' from ROW edge or 80' from road center line, whichever is more. This reduction from the current requirement of 50' from ROW edge

will create an urban atmosphere along Pulaski Highway.

- Investigate the potential for a 2-way hiker-biker path through the district adjacent to the railroad ROW (in addition to bicycle facilities on Pulaski Highway).
- To enhance both full four way access to businesses along the strip area between the highway and the railroad and better manage

highway curb cuts, consider a creating segments of one-way frontage roads along certain section of the highways with the current ROW. (See Concept B perspective image)

Figure 9 - Future Pulaski Highway Concepts

PULASKI HIGHWAY CONCEPT 'A'
PERSPECTIVE



PULASKI HIGHWAY CONCEPT 'B'
PERSPECTIVE



LAND USE ANALYSIS FINDINGS

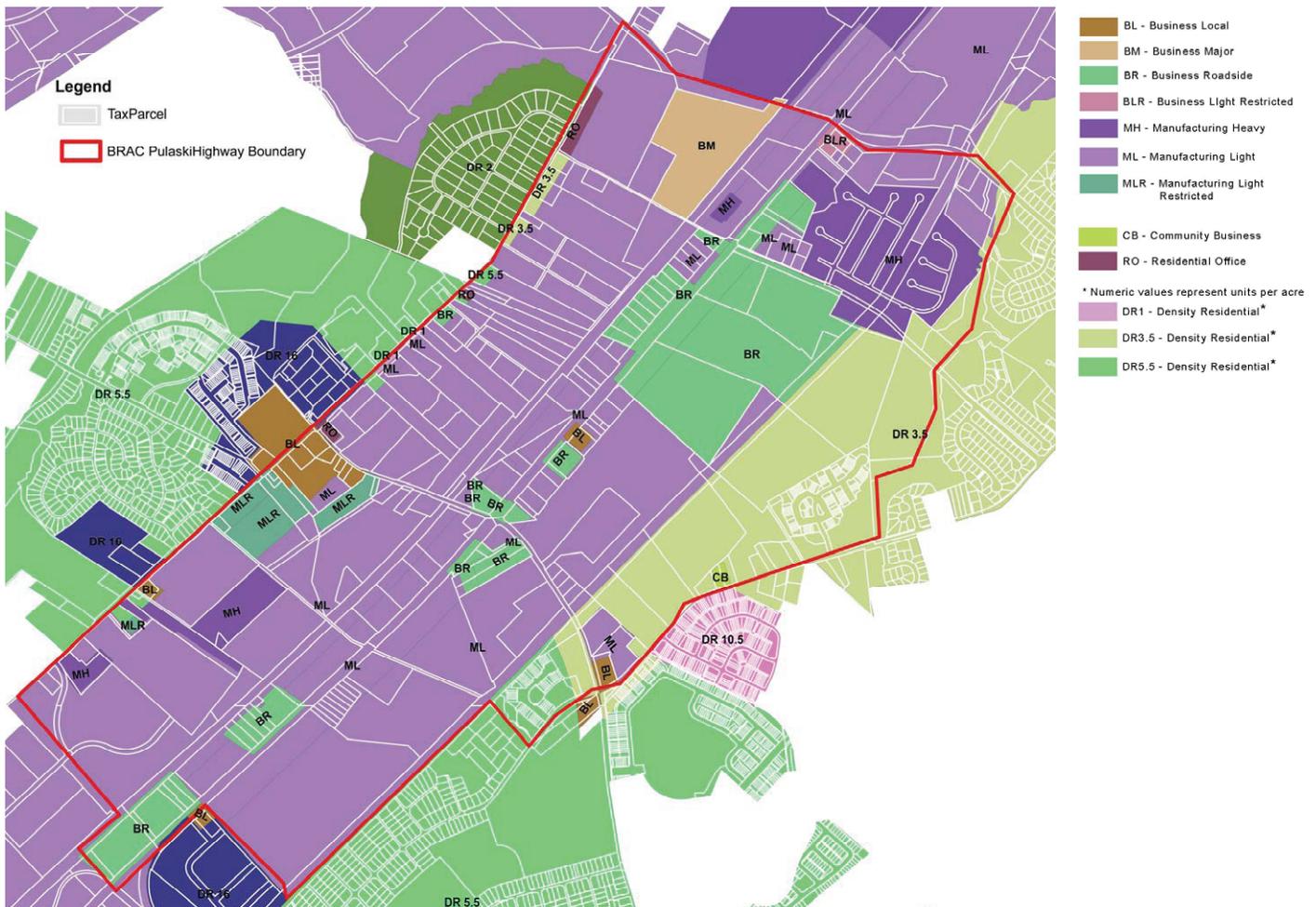
Based on the transportation analysis findings it appears that a well-planned walkable community district is feasible with the addition of a reasonable network of local road links and key road upgrades in the near and long term. A high intensity district, at least as large as the numbers shown for Scenario 4, can be supported. Assuming therefore that the overall district size will not be dictated primarily by traffic capacity, other factors begin to shape the district.

A twenty five year district target size should be agreed upon that reflects on the consensus on other issues such as: community support; densities and critical mass needed to achieve an agreed upon vision for a walkable community; current and evolving real estate market for the area as its reputation changes. It should also reflect the need to offer property owners sufficiently better benefits from redevelopment, infill and renovation so they are able to advocate for this option rather than to accept current built conditions and zoning rules.

Continued planning and analysis is needed for the study area. The County should continue to coordinate with the Maryland Department of Planning and pursue a local designation as a ‘Sustainable Community’ for the study area to insure the State’s continued support. Further, the County should:

- Conduct a charrette or community workshop to directly engage all interested parties and property owners in formulating a cooperative and holistic plan.
- Create the tools offered in other jurisdictions to resolve environmental conflicts and offer cooperative solutions to roads, wetlands, storm water management, forest and other areas of concern.
- Provide specific language for zoning ordinance changes and special tax benefit districts

Figure 10 - Current Zoning



A REFINED DISTRICT SCENARIO

Below is a refined District Concept that reflects initial community comments and transportation findings. This plan along with the following tentative land use program, visualizations and design principals are recommended as the starting point for the property owner discussions, community workshops and detailed planning of Phase 3. Following the concepts for the overall district are concepts for four subareas within the district.

PROPOSED VISION STATEMENT: Create a branded mixed-use employment district that is a complete walkable and sustainable community that will attract more jobs and encourage more redevelopment than current zoning and regulations.

COLLABORATIVE FRAMEWORK: Create this vision through the active participation and coordinated planning of district property owners, the community, and appropriate County and State agencies. Define distinct strategies and development mix target and regulations for each of four subareas. Coordinate design and planning with and among the owners of the major blocks. Create a framework plan illustrating agreeable street patterns and plan changes that can

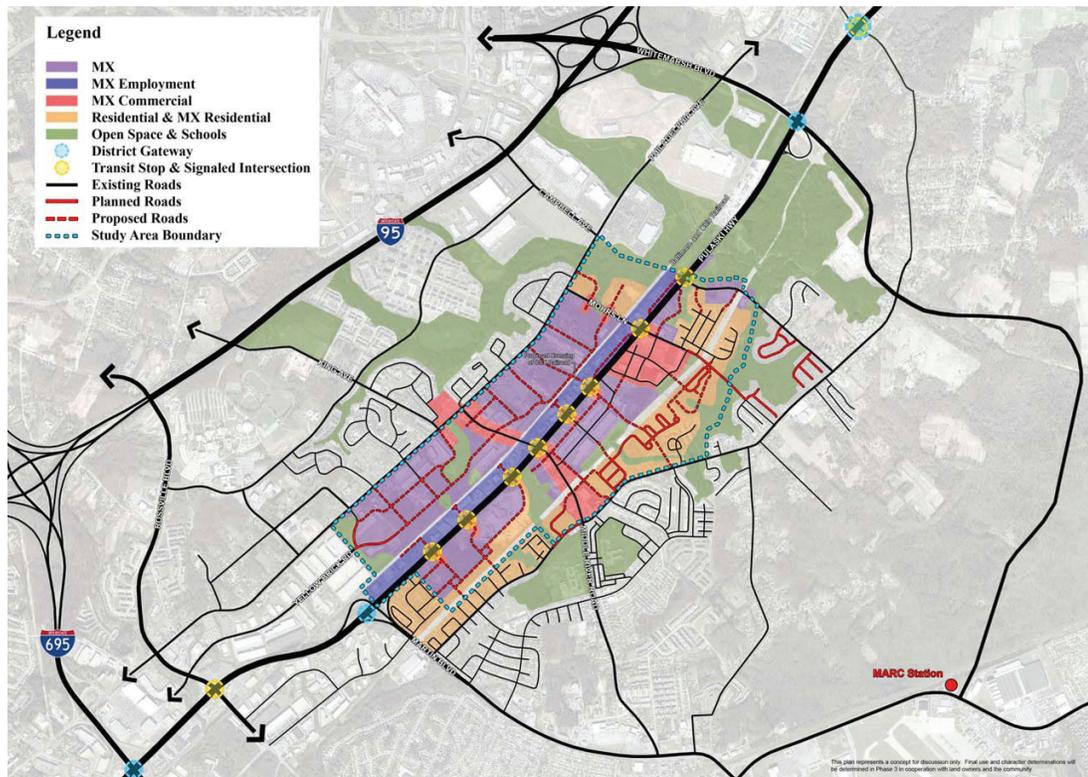
accommodate incremental infill and intensification over time.

MIXED LAND USES: Plan for a balanced mix of land uses in the district. Establish mix targets by sub area. Enable and promote a fine grained mix of uses within easy walking distance of each other or in the same building. Promote the creation of places and centers to the district and its neighborhoods that are focused around community shopping clusters and transit stops. Permit, but do not require a mix of uses on each parcel.

CONCENTRATIONS AND TRANSITIONS: Concentrate business uses and truck uses closest to Pulaski Highway and the railroad tracks. Integrate community uses further away from these corridors and increase community oriented scale, character and uses in those areas closest to the Bird River Road and Philadelphia Road corridors.

EMPLOYMENT USES: Office, flex space, warehouse and industrial uses built in an attractive walkable block pattern with services, retail and housing mixed in where suitable. Block patterns should accommodate truck based businesses and storage yards.

Figure 11 - Future Zoning Concept



COMMUNITY RETAIL & SERVICES IN SEVERAL FORMS AND LOCATIONS SUCH AS:

- An enhanced community retail center at Costco center with integrated office and residential space
- Attractive multi-site village center at Middle River Road and Bird River Road
- Attractive multi-site village center at Middle River Road, Philadelphia Road and King Avenue
- Retail, office and transit stops co-located along Pulaski Highway
- Mid scale street front retail along Mohrs Lane, Middle River Road and Philadelphia Road

RESIDENTIAL AREAS: Homes should include a mix of types and needs; single family homes, townhomes, good quality multi-family and senior housing near shopping.

CIVIC USES: Public and private community uses to support the district including an elementary school within walking distance if needed and possible.

OPEN SPACES: Visible and usable pocket parks, greens and natural open spaces with parks within walking distance of the district.

URBAN FORM: New development should form an attractive walkable block pattern. New rules will reduce front, side and rear building setbacks allowing buildings to be placed close to the sidewalk. Allow zero setback buildings in some areas and situations. A traditional village-like street environment with public on-street parking and private parking to the side and rear of buildings should be created.

GATEWAYS: Create attractive community gateways on Pulaski Highway and other main district entrances. Pulaski Highway: Treat Pulaski as an attractive low speed boulevard style arterial, sized to accommodate smooth flowing through traffic in the near and long term, providing ample, managed access to district businesses, and safe travel along and across the road by all travel modes. Use boulevard design to establish gateways and brand the district.

YELLOW BRICK ROAD: Extend this street from Rossville Blvd to Mohrs Lane. Treat it as a business service road and as a new district business address.

MIDDLE RIVER ROAD & MOHRS LANE: Plan for these two streets and their railroad bridges to serve as community spines with attractive streetscapes and street front buildings that connect both sides of the district and funnel pedestrians from the two neighborhoods on each side of the highway to transit stops along Pulaski Highway.

PHILADELPHIA ROAD: Plan this street as a community scaled and oriented mixed use 'main street' limiting widening as far as practical.

INTERCONNECTED STREET NETWORK: Create an interconnected street network in walkable block patterns, in sizes suitable to the community's land uses, to distribute traffic loads and relieve congestion. Design streets for safe and comfortable use by all modes by recognizing the important activities occurring on the street. Include connected private alleys, drives and parking lots as part of the network. Lay out this network in cooperation with land owners during Phase 3 so that independent incremental changes can follow the agreed upon plan.

PARKING: Create public on-street parking. Promote shared and connected private parking lot designs set away from streets. Plan for a community that works well with surface parking and lower-height buildings, but can accommodate incremental intensification over time.

TRANSIT: Plan for low levels of transit support in early years and the possibility of improved service in future years when the counties and State Department of Transportation create and implement a regional transit strategy for the Pulaski corridor and Middle River Redevelopment Area. Provide safe attractive pedestrian links to existing and future transit stop locations and comfortable stop amenities. Plan for more intense development with a greater mix of uses at future transit stops.

REFINED SUB-AREA CONCEPTS

For purposes of detailed planning among smaller groups of property owners in areas with shared issues and opportunities, it is recommended that the Phase 3 process be organized to undertake planning in smaller units. The district framework plan will create regulations that reflect the specific situations within each of the sub areas. These areas and the concepts for each area are as follows:

Figure 12 - Subareas within Redevelopment Area

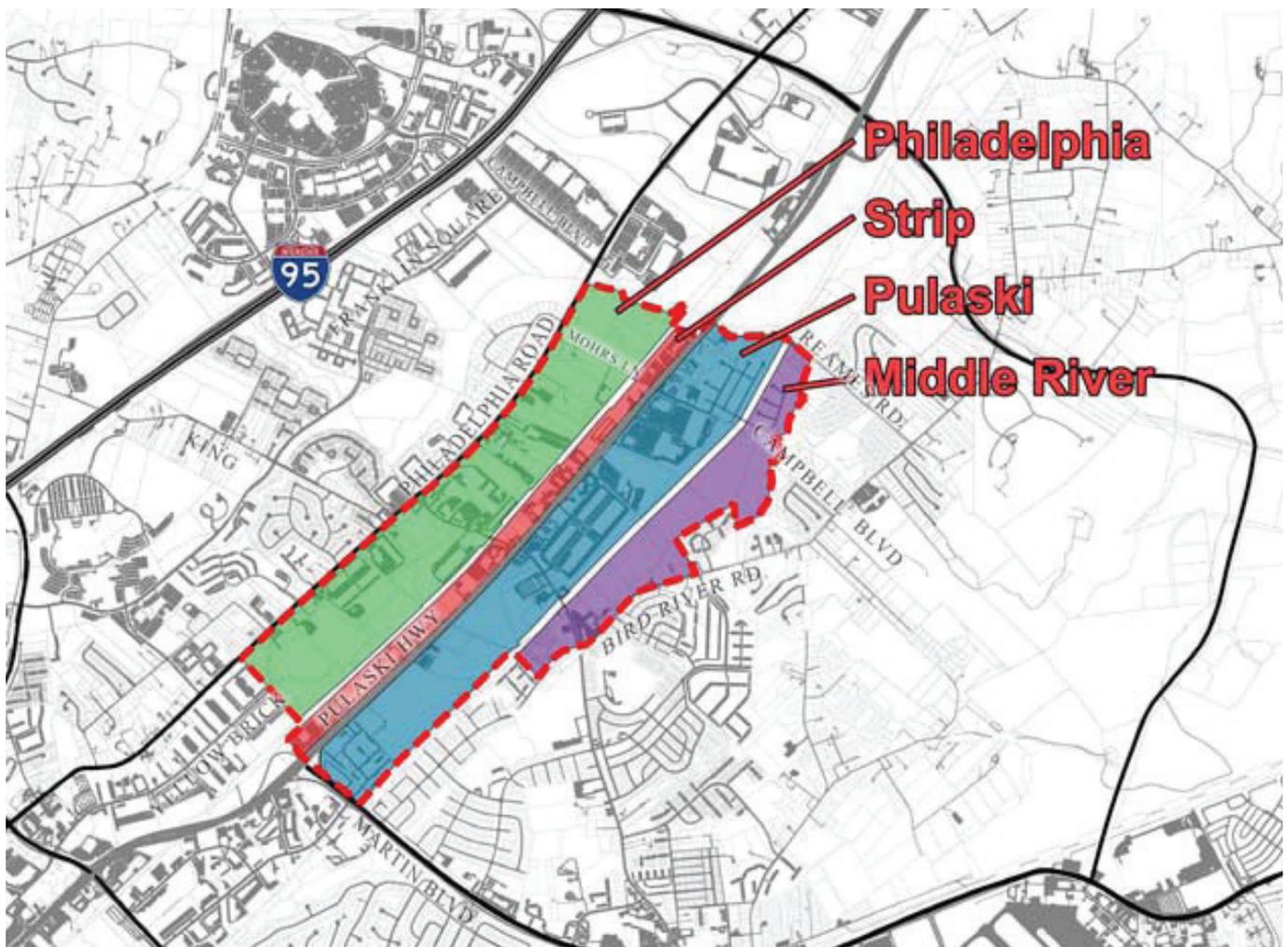


Figure 13 - Philadelphia Road Sub-Area

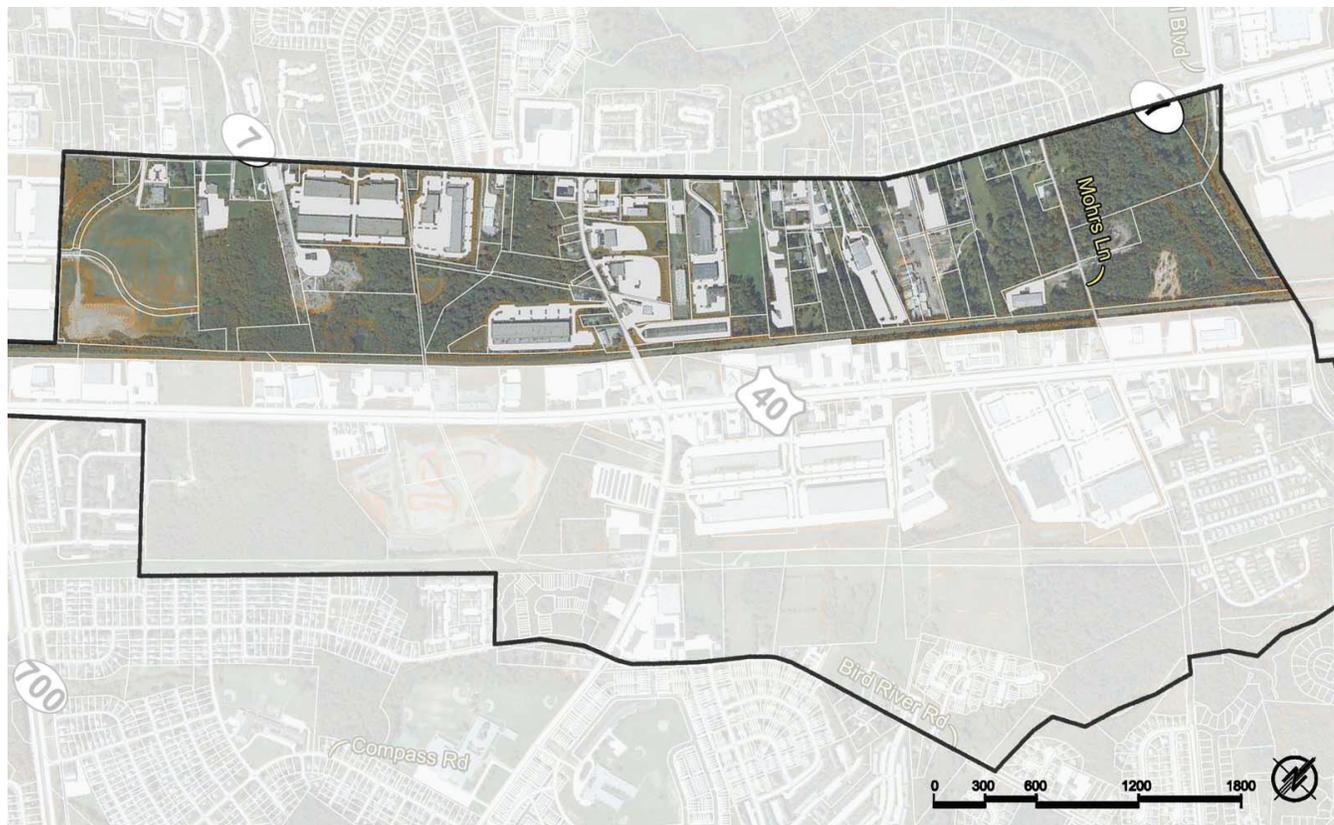


Figure 14 - Strip Sub- Area

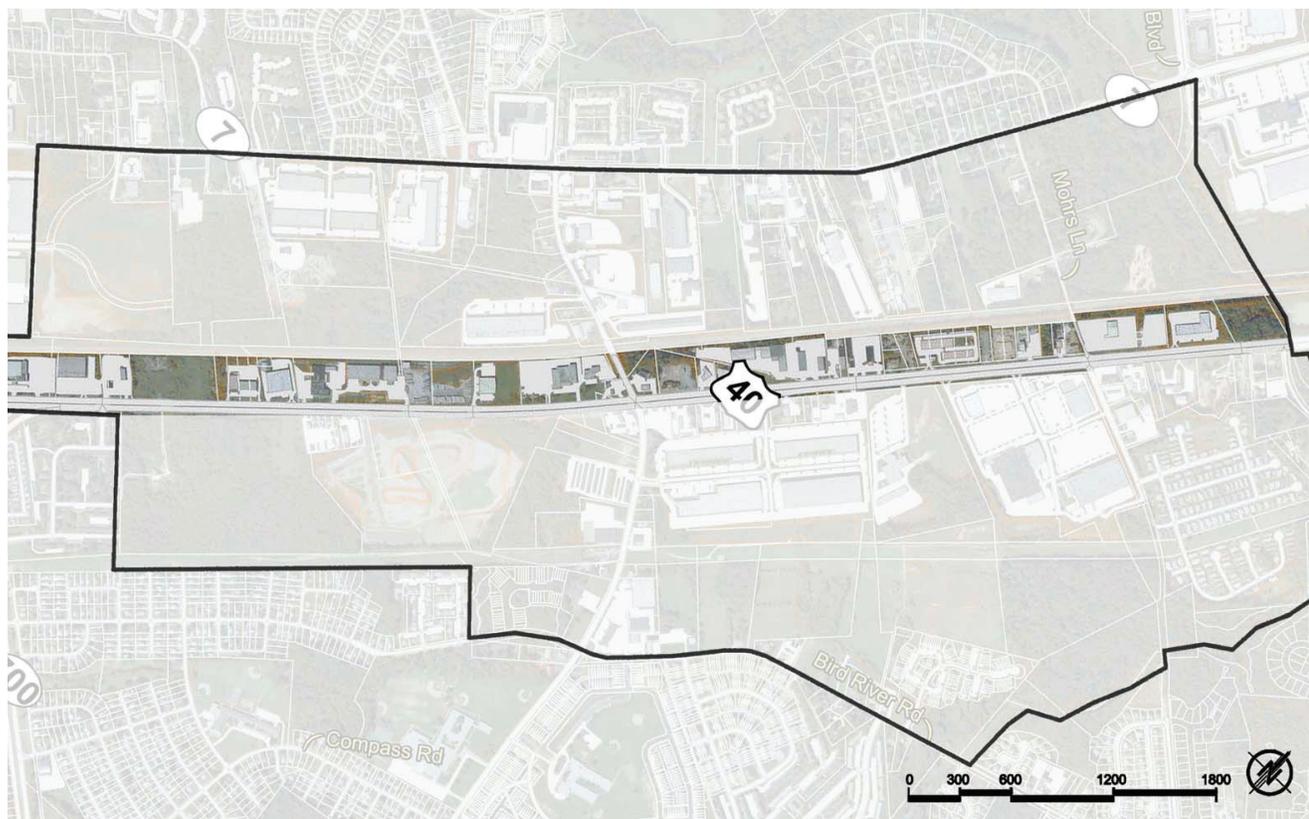


Figure 15 - Pulaski Highway Sub-Area

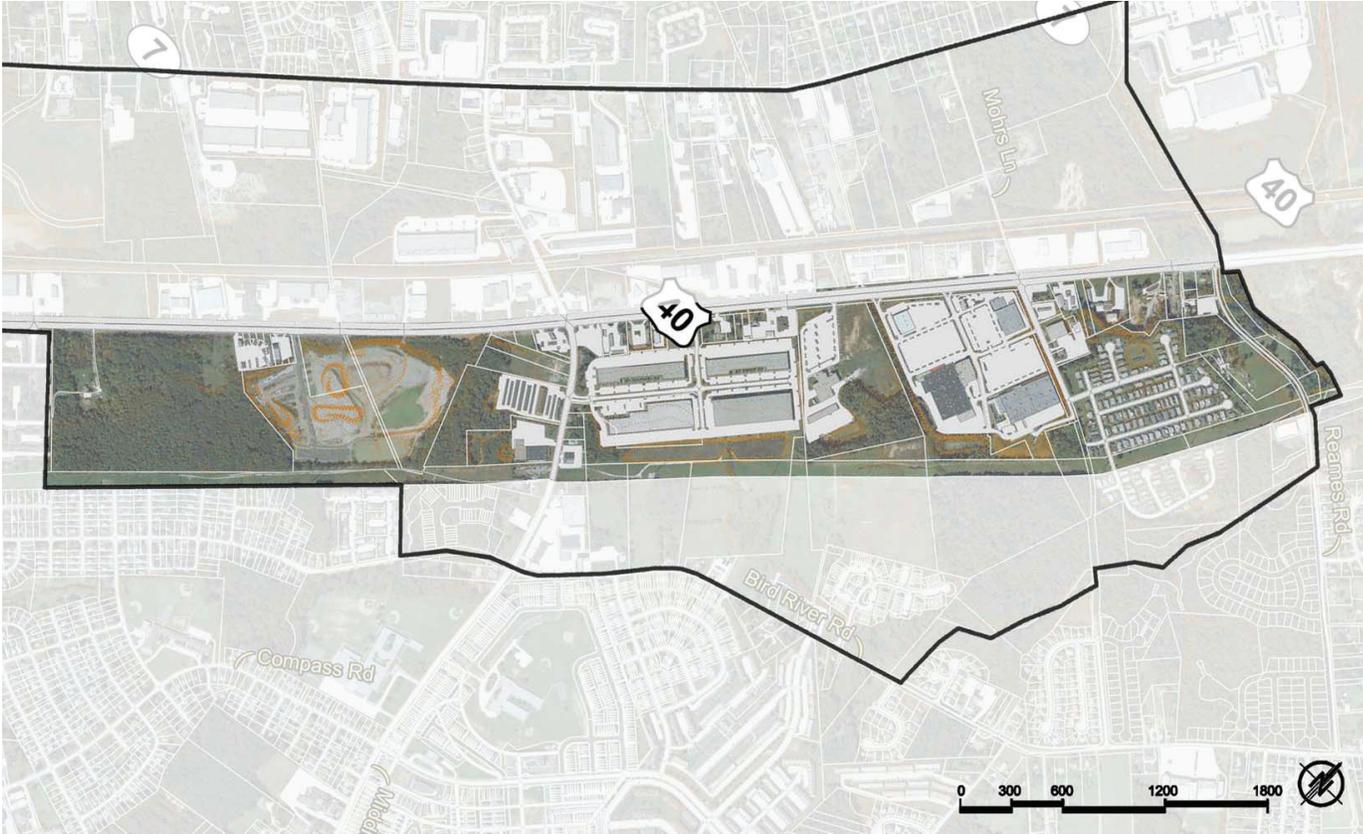
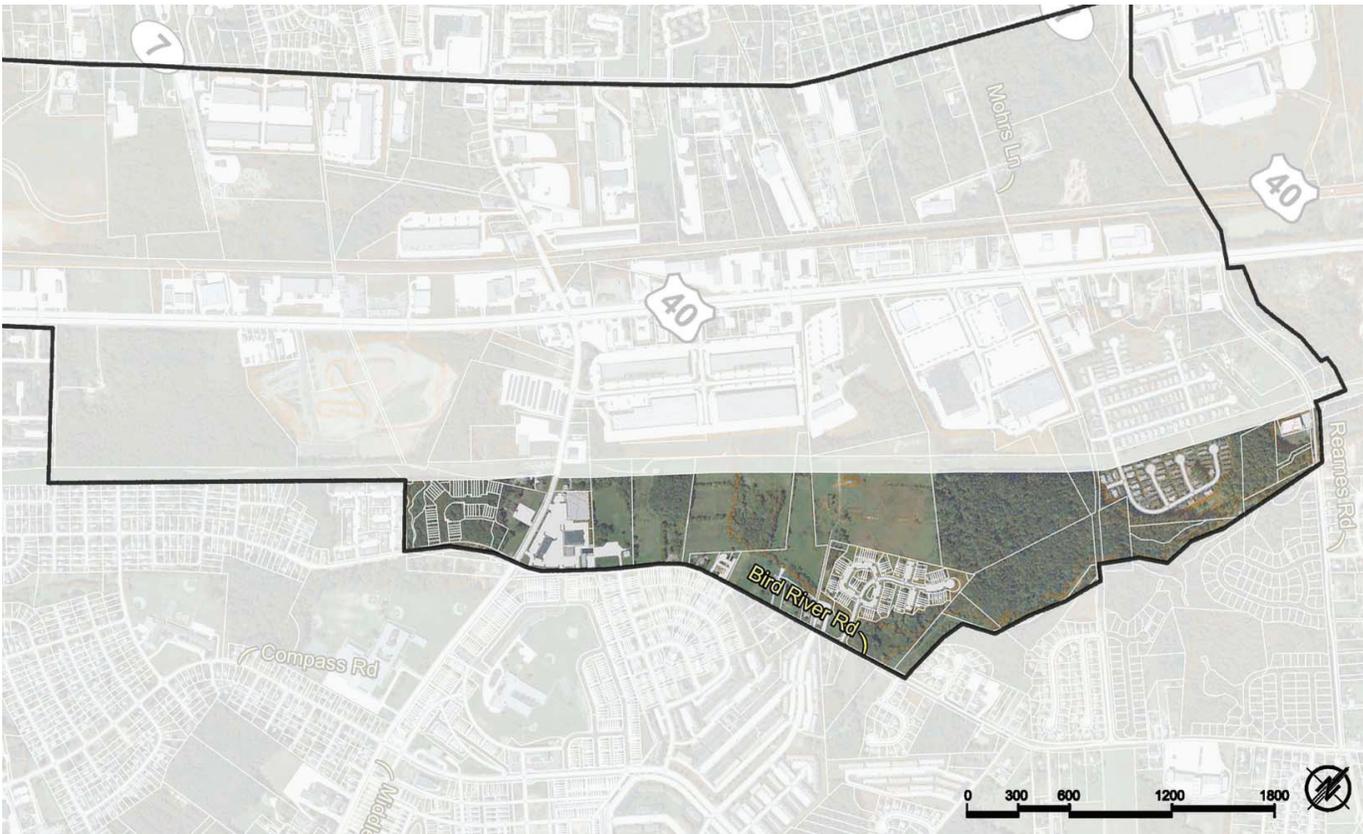


Figure 16 - Middle River Sub-Area



1. Philadelphia Road Subarea: This is an approximate 269 acre area with approximately 74 parcels owned by approximately 47 entities that are situated between the CSX railroad tracks and Philadelphia Road.

CONCEPT: Concentrate new business uses and truck uses closest to the railroad tracks and Yellow Brick Road. Treat Middle River Road and Mohrs Lane as community spines with attractive streetscapes and street front buildings and on-street parking. Plan Yellow Brick Road as a business street for most of its length. Integrate residential and community uses in the blocks closer to green open spaces, Philadelphia Road, Middle River Road and Mohrs Lane. Encourage community-oriented scale, character and uses in those areas closest to the Philadelphia Road corridor. Development along Philadelphia Road should be community-scaled and oriented mixed-uses to create a 'main street' character. Plan for an attractive multi-site village center at the intersections of Middle River Road, Philadelphia Road and King Avenue.

2. The Strip Subarea: This is an approximate 62 acre area, comprised of 200-300 foot deep strip of lots with approximately 40 parcels owned by approximately 20 entities and situated between the CSX railroad tracks and Pulaski Highway.

CONCEPT: Promote continued infill, development and renovation of business-oriented uses to create an attractive landscaped boulevard. Improve and coordinate parcel access connecting parking lots and alleys where possible and coordinating with locations of several (3 to 5) new traffic signals and a possible frontage lane in the highway ROW. Create parallel public parking along frontage road and shared parking to the side or back of buildings that will line the boulevard. Reduce building setback requirements so that new buildings are placed closer to the new Pulaski boulevard edge.

3. Pulaski Subarea: This is an approximate 280 acre area with approximately 57 parcels and owned by approximately 35 entities and situated between Pulaski Highway and the power line ROW.

CONCEPT: Promote continued infill, development and renovation of business oriented uses along the highway frontage to create an attractive landscaped boulevard character. Improve and coordinate parcel access with logically spaced roads located to support

shared access, new traffic signals, and shared alleys along the back of shallow frontage lots. Reduce building setback requirements so that new buildings are placed closer to the new Pulaski boulevard edge. Create 3 to 4 new street connections between Pulaski Highway and Bird River/Transverse Road where possible placing traffic signals, transit stops and modest amounts of retail at these new intersections along Pulaski Highway. Promote new local links that parallel Pulaski Highway connecting as much of the sub-area as possible between Campbell Boulevard and Middle River Road and tying into Kelso Drive. Incorporate services and residential uses towards the back of parcels, away from the highway and near open spaces. Promote an enhanced mixed-use community at the Costco center over the long term, including offices, infill retail, and residences. Treat Middle River Road as a Complete Street and community spine with attractive streetscapes and street front buildings and on-street parking.

4. Middle River Subarea: This is an approximate 151 acre area with approximately 213 parcels owned by approximately 132 entities and situated between the power line ROW and Bird River/Transverse Road.

CONCEPT: Promote creation of an interconnected residential neighborhood with 3 to 4 new street connections to Pulaski Highway and to Campbell Boulevard from Bird River Road/Transverse Avenue. Promote creation of an attractive village center, a multi-site cluster of retail and civic uses around and near the Middle River Road and Bird River Road intersection to provide a neighborhood focus and center.

DISTRICT PLANS ELEMENTS

Based on information collected to date the process and elements of the district plan should include the following set of implementation tools.

DECISION-MAKING PROCESS: A plan and development tools will be drafted in the next phase of the project through a community workshop/charrette process, and should be presented to the County Council for public hearings and adoption. This process will use the feasibility analysis described in this document and include the active participation of and coordination between land, business and home owners, civic leaders, the County, the State and other stakeholders.

ZONING & REGULATIONS: A new mixed-use overlay zone will be applied to the district over existing base zones. This will include sub-categories with varied use mixes suitable for defined subareas within the district, a Community Pattern Book, and a negotiated physical Framework Plan that maps the regulations for building heights, setbacks and circulation patterns and other key features within the district. A new development approval process should be established for the district allowing by-right development for entitlement plans that comply with the framework plan, and a defined process, with community input, for proposals that make refinements to entitlement plans. The framework plan should establish district-specific provisions for regulations pertaining to context sensitive road design, innovative district-wide public-private coordination of forest and other environmental mitigation sites, and coordinated flood storm water management solutions and stream restoration efforts.

ENTITLEMENT PLANS: For those developers and owners who may request immediate site plan approval and the ability for immediate development under the approved plan, the Phase 3 process can include bundled development and approval for these plans at the same time as the overall framework plan.

PARTICIPATION OPTIONS AND TIMING: Careful language will define options and obligations for overlay compliance based on the degree of renovation, expansion and development. Options for minor renovation to opt out and for existing sites to be grandfathered will be explored. Also possible agreements to delay changes in tax valuations, based on overlay application, until triggered by an opt-in request will be explored.

ASSISTANCE: The County Economic Development Department could assist land owners to attract developers, and assist business/land owners who propose to relocate and redevelop their property, to find new business locations.

POSSIBLE INCENTIVE MECHANISMS: The County could offer various forms of tax credits or other tax deferrals to help catalyze development in the district. These will be reviewed and recommended as part of Phase 3. Pre-approved open space areas in or near the district will be planned, if possible, that can be utilized to meet required forest conservation, wetland mitigation and other required environmental mitigation elements in the district.

COST & FUNDING SOURCES: This project proposes to leverage current County Capital Improvement Projects and County requests for State Highway Administration assistance to improve Pulaski Highway and Philadelphia Road in support of needed maintenance and safety upgrades that can be catalytic to private infrastructure investment. Beyond this level of public investment, needed road and utility improvements should have a clear path to organize contributions from private development. Orderly incremental construction of roads and utilities will require special mechanisms to collect private sector funds and credit the construction of timely improvements. Current CIP plans include the Mohrs Lane Bridge and Campbell Boulevard extension, and the Yellow Brick Road extension to Middle River Road. Mechanisms such as special tax benefit districts and system development changes will be explored and established if found to be required to help fund these elements.

COMMUNITY FACILITIES & SCHOOLS: Provision of adequate community facilities to support the district will be coordinated in Phase 3 with particular attention paid to ensuring the timely provision of adequate schools and promoting new school(s) within walking distance of homes in and near the district.

DISTRICT PLACE-MAKING & BRANDING: The district will become a distinct place within the county with attractive gateways on the major entrances and two or more mixed use village centers. A district name will be selected during Phase 3. One suggestion is Popular Station as this is the name of the area's former rail stop.

NEXT STEPS

For any of these development scenarios to proceed as discussed, a long-term strategy of coordination and monitoring of the district would need to be formulated during the community workshop/ charrettes in Phase 3. The district would be considered a 'master planned' area with its own set of rules established by an overlay zone, and the county's development review staff would accept responsibility for coordination and monitoring to insure that the plan is implemented as proposed. Issues for staff to consider in this task include:

1. What is the boundary for participation in the district; can it be changed over time?
2. Is participation in the district mandatory?
3. Who monitors the 'mix of uses' to encourage, balanced development ratios over time?
4. Is there a mechanism for grandfathering existing development rights? (Similar to the PUD process)
5. Is there a mechanism to resolve, in a collective manner, environmental solutions that address forest stands, wetlands, storm water management? If so, who should be holder of the keys to a district mitigation bank?
6. Is there an opportunity for a special tax benefit district which supports needed improvement, and which could be applied offsite or out of the district if the connection can be made between contributing sites and district road improvements?
7. What transportation analysis and mitigation tools are acceptable and feasible for proposed new road connections and retrofit upgrades? What catalytic support will be required and can be supported for public investment?

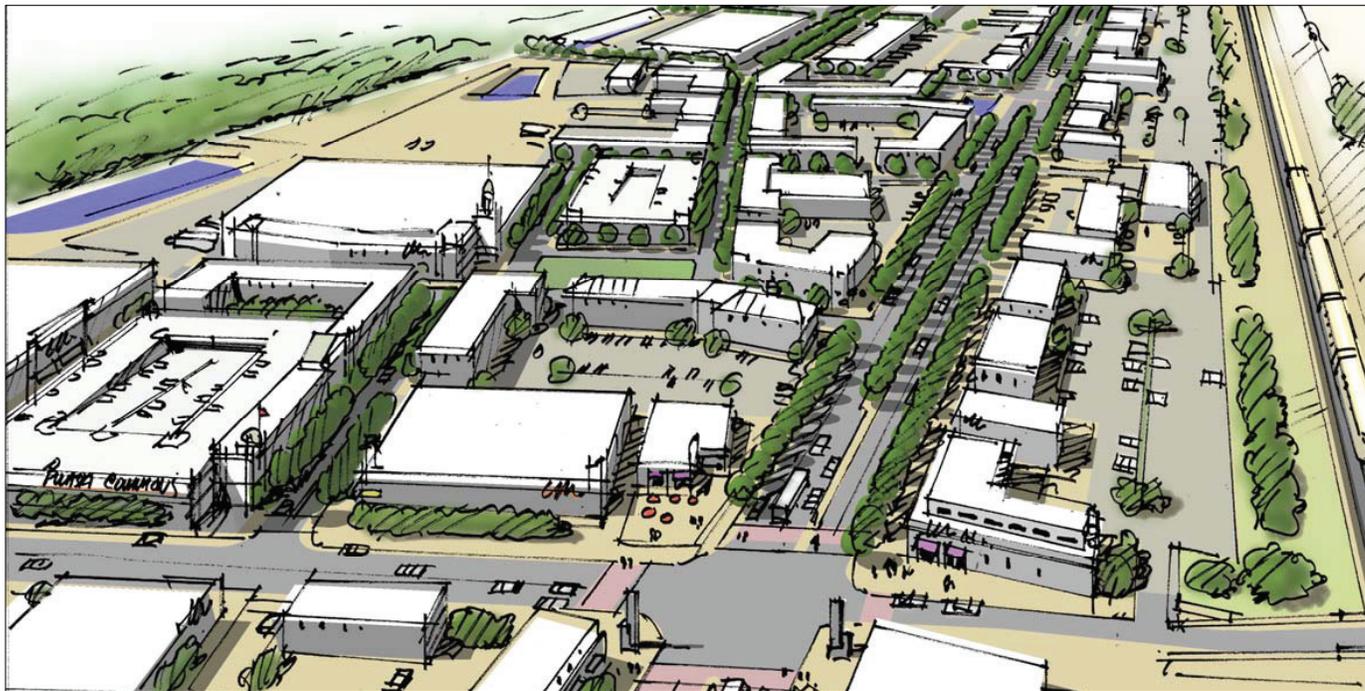
Part of the next phase of work is to tailor the county's regulatory and administrative guidance to ensure success. Potential developers, property owners and even neighbors will help identify potentially important aspects of county coordination of private activities. Prior to the next phase of work, the county will need to articulate its intended willingness to play a coordinating role.

APPENDIX

DISTRICT CONCEPT VISUALIZATION AIDS

While detailed planning will not begin until Phase 3, the following studies and sketches have been prepared now to help property owners and the community better visualize the possible district character and elements under consideration. These images are intended to serve as a beginning point for discussions and to illustrate the kinds of places and changes what might be possible. They are created as computer models that can be easily manipulated and refined during property owner and community work sessions. The images illustrate places and change what might be possible. They are not intended to advocate specific changes to any particular properties or buildings, rather they show an example of several owners responding to new opportunities, cooperating for their mutual benefit and making incremental changes over the next twenty five years.

A possible Pulaski District & Boulevard in 25 years; view south from Mohrs Lane/Campbell Blvd.



The same highway section today



A possible community gateway space at Mohrs Lane & Philadelphia Road in 25 years



A possible residential area on Mohrs Lane overlooking the open space in 25 years



Two images and a sketch plan of a possible Mixed-Use Village Center Area at Philadelphia Road & Middle River Road in 25 years

1



2



3



A possible smaller mixed-use village center as the focus of the southern neighborhood at Bird River Road and Middle River Road in 25 years



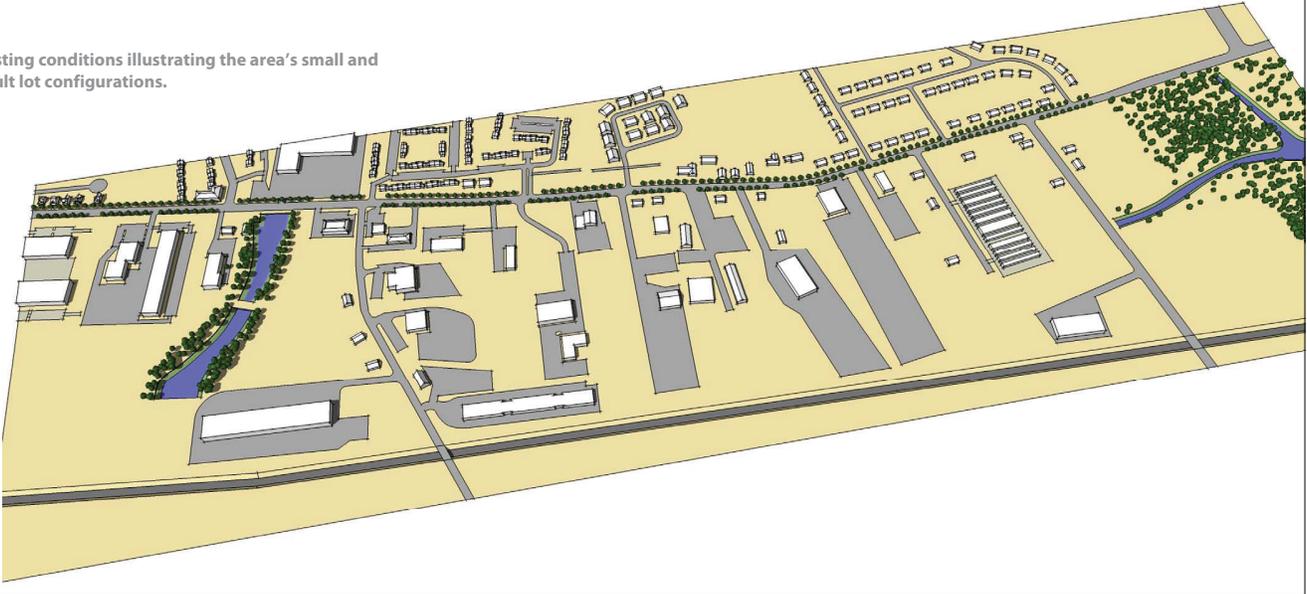
*Example of Coordinated Block Planning
Middle River Road to Mohrs Lane Block Philadelphia Subarea*

Existing conditions, possible Yellow Brick Road alignment

A three image sequence showing one possible scenario of 25 years of infill and redevelopment. Philadelphia Road is to the top & the railroad tracks are at the bottom of the images.

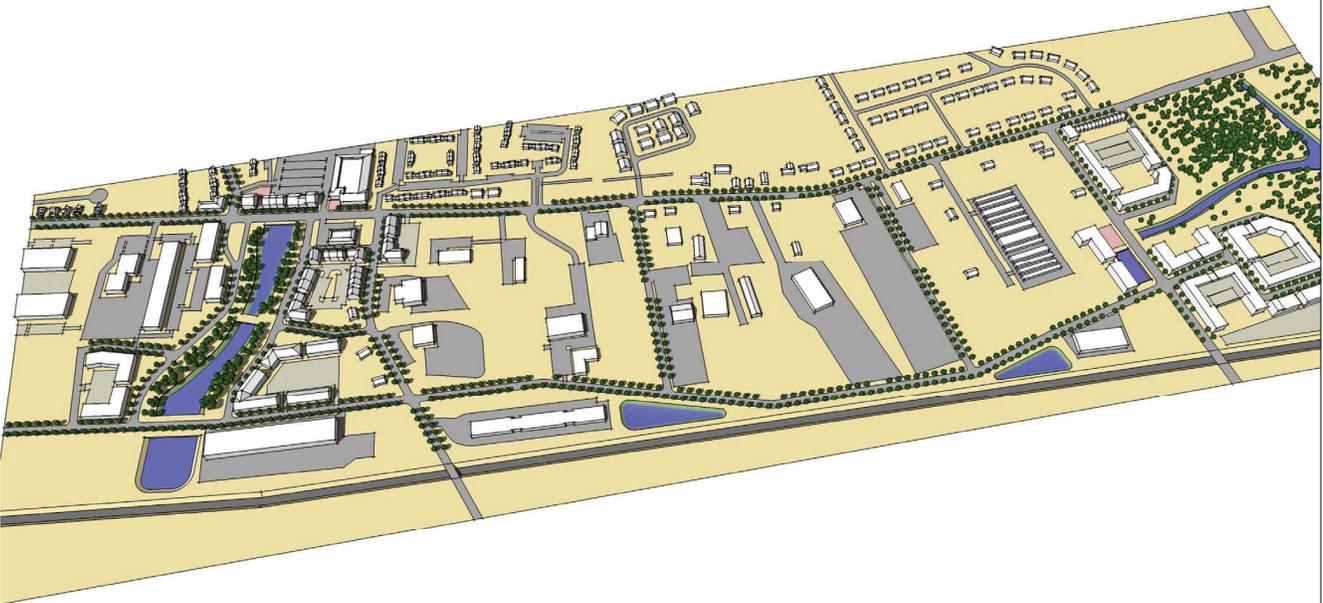
1

1. Existing conditions illustrating the area's small and difficult lot configurations.



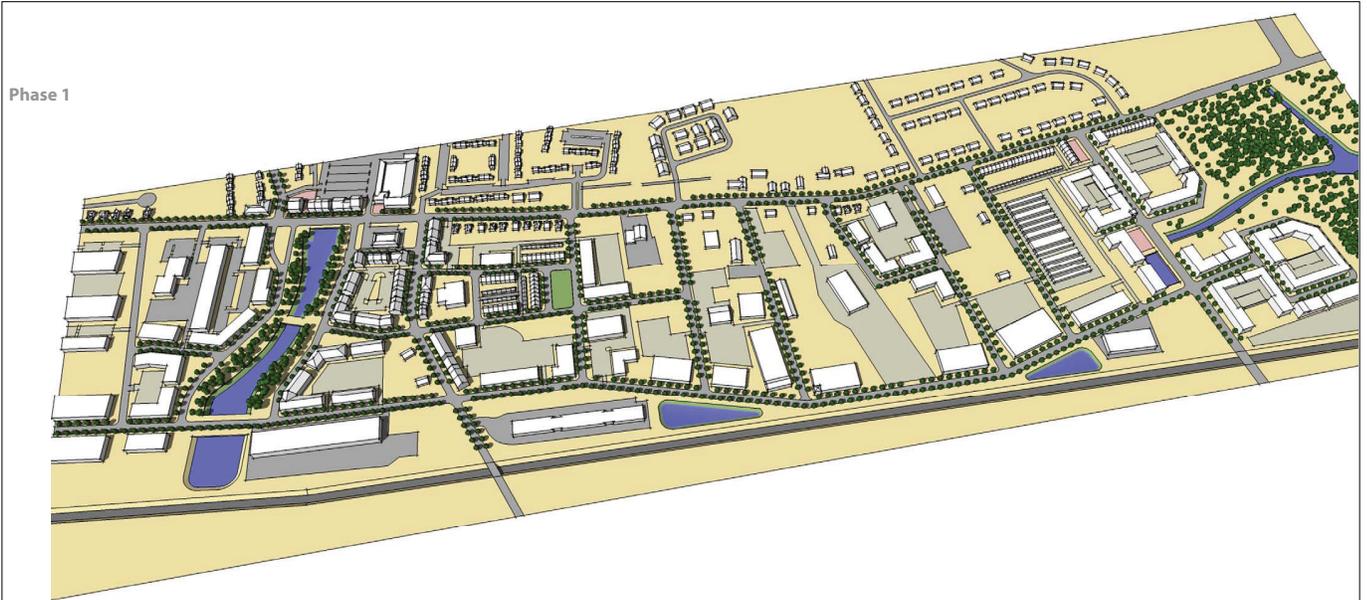
2

2. One possible alignment of Yellow Brick Road Extended from Rossville Boulevard to Mohrs Lane creating new development lot frontage and access.

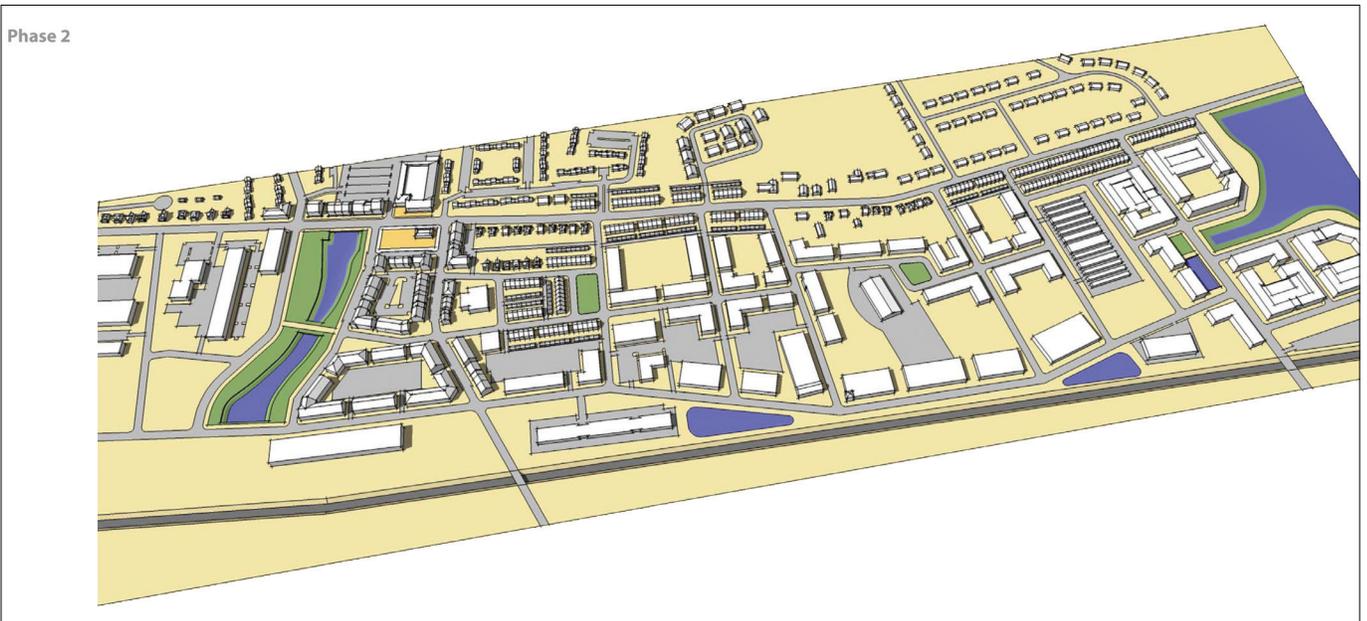


3, 4 & 5. One possible pattern of incremental infill and redevelopment creating new smaller block patterns with smaller streets, shared drives and interconnections between parcels. This example places the largest industrial buildings along Yellow Brick Road and the railroad tracks. It also places smaller neighborhood scale buildings along Philadelphia Road.

3

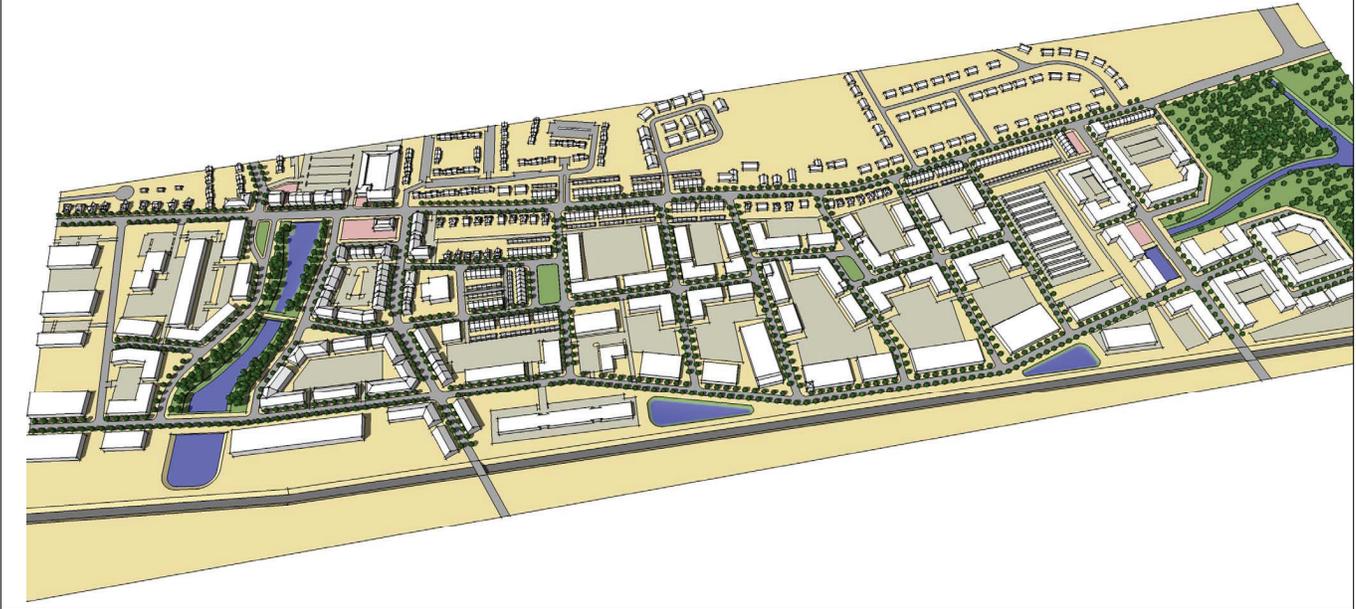


4



5

Phase 3

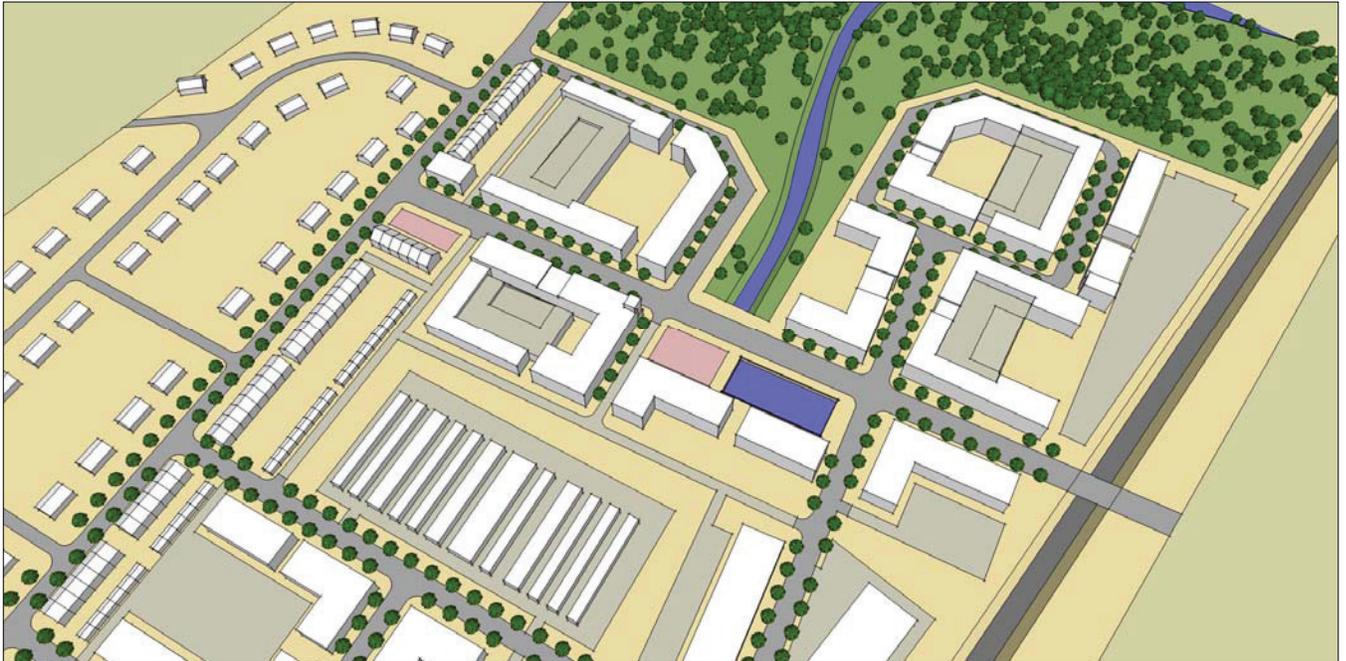


Potential new development along Mohrs Lane; three views

1



2



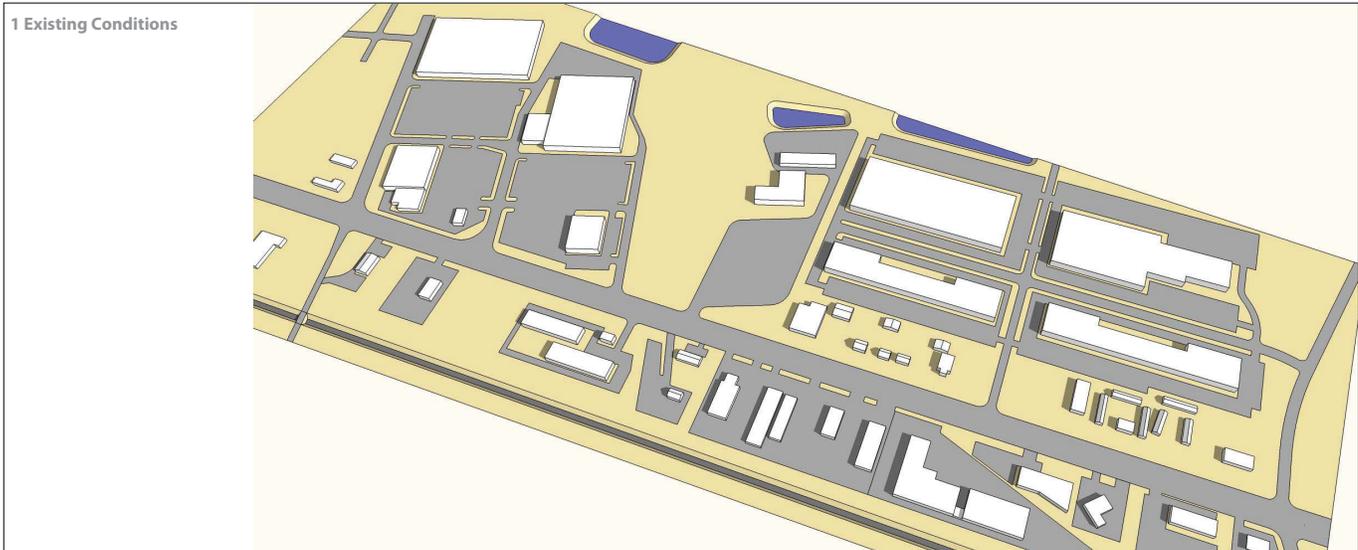
3



Another example of Coordinated Block Planning Along Pulaski Highway in the Strip and Pulaski Subareas

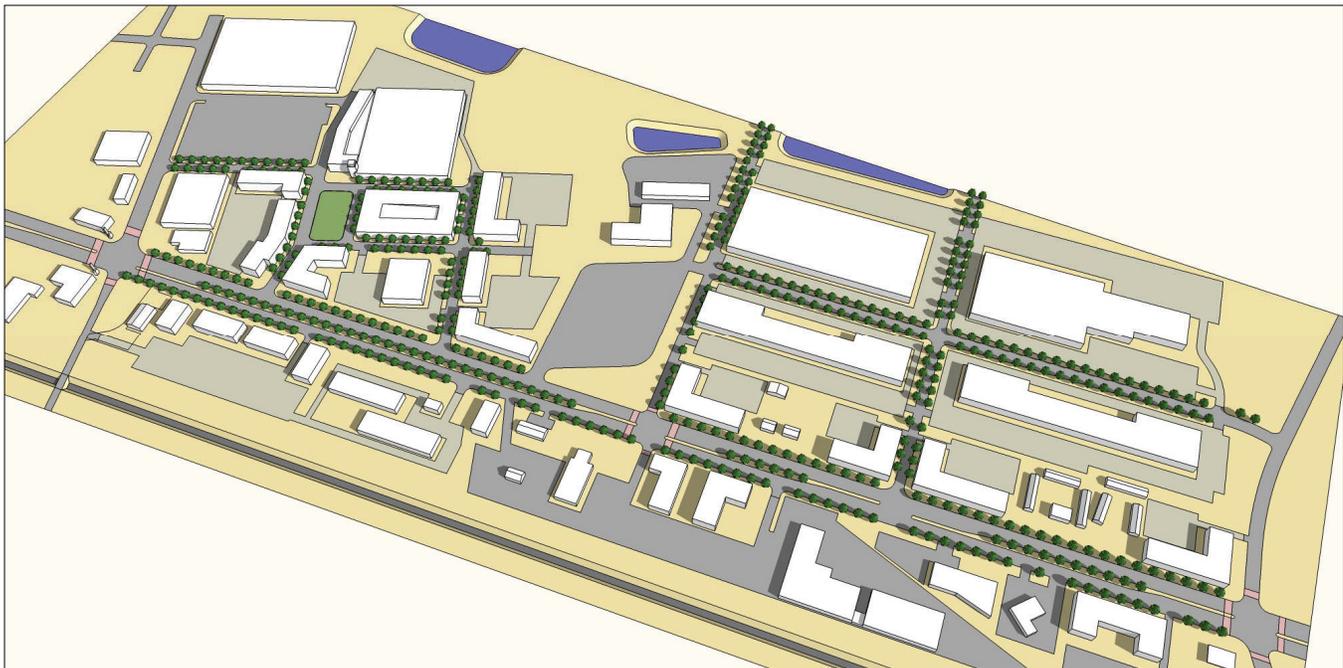
The CSX railroad tracks are at the bottom of the image, Middle River Road is to the right and Mohrs Lane/Campbell Boulevard Extended is to the left.

1. Existing Conditions



2. Addition of a new traffic signal between Middle River Road and Campbell Boulevard.

Two possible connections to Bird River Road beyond the end of the image, and examples of possible infill & renovations.



3. Possible character after 25 years of coordinated incremental infill & renovations.
This includes a long term idea for a mixed use infill on the Costco retail site with parking garages.

