

VERNOR CROSSING SOUTHWEST DETROIT

CNU 24 CONGRESS LEGACY CHARRETTE









The work presented in this document was produced for the Congress for the New Urbanism, CNU 24 Legacy Charrette Program

The client was the Michigan State
Housing Development Authority and
Southwest Detroit
Business Association

The volunteer team of architects & planners was led by **Dhiru A. Thadani**

CHARRETTE TEAM

CLIENT

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> Southwest Detroit Business Association Kathy Wendler, President Theresa Zajac, Vice President Ouida Jones, Real Estate Project Manager

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LEGACY CHARRETTE

Each year, CNU's Legacy Charrette teams work in the Congress host region to empower local leaders, advocates, and residents to implement New Urbanist principles, and build places where people and businesses can thrive and prosper. Each Legacy Project culminates in a three- to four-day workshop on site to explore opportunities, identify crucial roadblocks, engage local residents in visioning, and generate top-of-the-line design and placemaking strategies and deliverables.

Once host communities determine their own needs and areas of focus, CNU's expert designers—national leaders in architecture, planning, placemaking, and revitalization—partner with local teams to prepare the scope of work, host the on-site workshop, and create the design deliverables. Those final documents are visual, engaging, strategic, and meant to be implemented immediately.

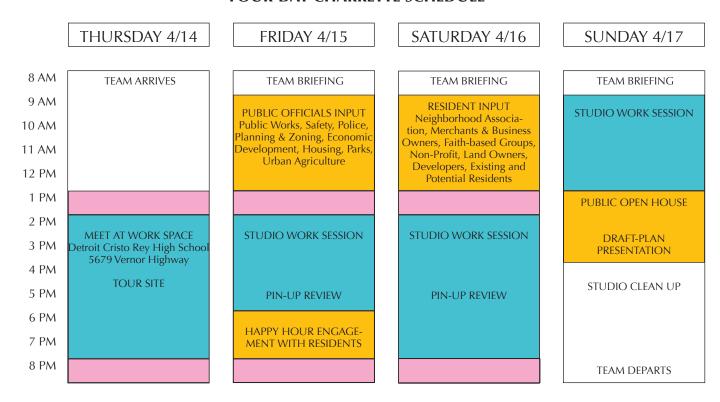
In April 2016, prior to CNU 24: The Transforming City, which was held June 8-11 in Detroit, MI, CNU brought its Congress Legacy Program to four Detroit-area communities:

- 1. City of Detroit: Vernor Crossing/Southwest Detroit
- 2. City of Detroit: Grandmont Rosedale
- 3. City of Hazel Park
- 4. City of Pontiac

Southwest (the subject of this report) is a region within Detroit. It comprises several neighborhoods including Delray, Mexicantown, Hubbard Farms, Detroit, Boynton-Oakwood Heights, and Springwells Village.

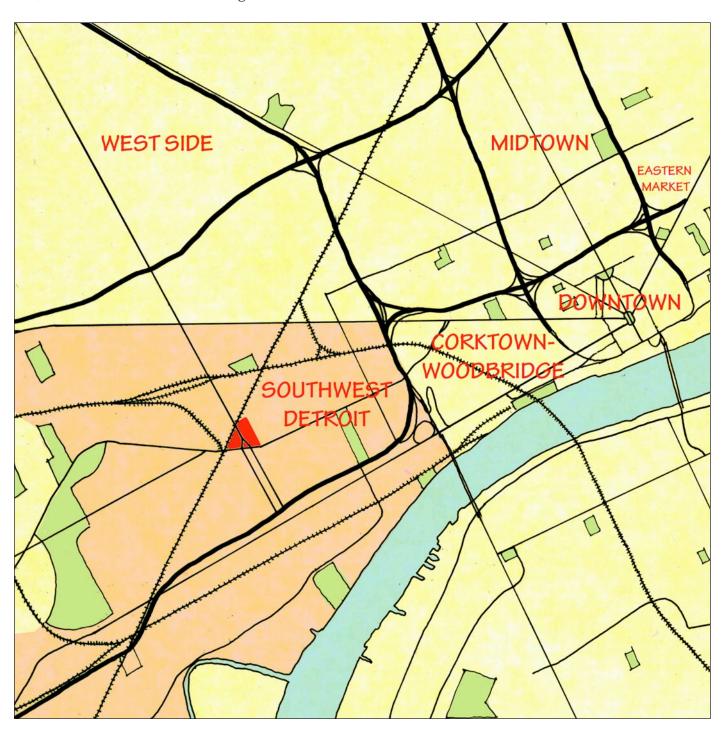
The four Legacy Charrette teams transferred their final plans to their respective communities on Thursday, June 9, 2016 as part of CNU 24.

FOUR-DAY CHARRETTE SCHEDULE



STUDY AREA

The site for the Legacy Charrette is centered on a 7-acre land parcel with a 60,000 square foot abandoned Detroit Public Works facility (shown in red). It is strategically located in the center of Southwest Detroit and lies between two neighborhoods, Springwells Village to the west and Mexicantown to the east. Southwest Detroit is bifurcated by active freight railroad lines which run adjacent to the site. To the west of the site is the Detroit Intermodal Freight Terminal which generates a large amount of truck traffic through the neighborhoods. The economic success found in the adjacent community of Corktown is causing lower-income residents to migrate west into Southwest Detroit in search of affordable housing. The Vernor Crossing site has the potential of transforming from a forgotten abandoned area into a mixed-use, mixed-income, walkable neighborhood that serves all the communities within Southwest Detroit.















EXECUTIVE SUMMARY

The Congress for the New Urbanism (CNU) works to balance design and policy in order to make communities better, more walkable, and sustainable. The members of CNU have a proven track record of building places people love that foster community and citizen pride. In 2016, CNU 24: The Transforming City was held in Detroit. In addition to hosting sessions, tours, and networking events, CNU organized four Legacy Charrettes (in and around Detroit) to promote and demonstrate the application of great urban design, guided by the CNU Charter.

In partnership with the Southwest Detroit Business Association, a team of national experts volunteered to investigate opportunities for new affordable and market rate housing and public space without displacing existing residents. The study area, focused at the intersection of Livernois Avenue and Vernor Highway, consists of several blocks of commercial and residential buildings and is anchored by the 60,000 square foot Detroit Public Works Building.

CNU's four-day Legacy Charrette included tours of the site, and extensive meetings with local officials, city staff, residents and stakeholders. Working in a classroom in a school building within the study area, the team developed a vision and implementation plan that supports phased development.

At the conclusion of the charrette, the project team presented Eight Action Idea for Southwest Detroit:

- 1. Eliminate freight truck traffic through the neighborhood
- 2. Reconfigure streets to create a central square
- 3. Convert vacant sites into new parks
- 4. Encourage residential activation of existing upper floors of historic mixed-use building
- 5. Use vacant city-controlled land for a variety of new housing types
- 6. Incorporate a range of civic spaces
- 7. Transform existing antenna tower into a neighborhood landmark
- 8. Reposition the Detroit Public Works Building into a community center and maker space.

To maximize the transformation of Southwest Detroit into a walkable community, all eight recommendations should be implemented. However, the eight may be implemented on varying timelines. The recommendation to eliminate freight truck traffic through the neighborhood is crucial for making a safe walkable environment. Two options are proposed for reconfiguring the Livernois-Vernor intersection and making a central "town green".

VISION AND PRIORITIES

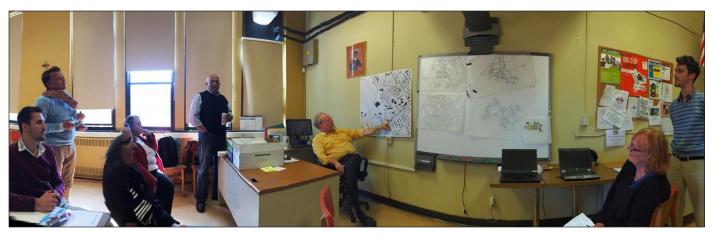
The inclusionary process with residents, business owners, and civic leaders, provided the team with an understanding of the strengths, opportunities and challenges of the area, which helped defined five framework principles to guide the charrette:

- Environmental Justice
- Civic Spaces with Pedestrian Focus
- Support for Existing Residents & Local Businesses
- Stewardship of Land by Enacting Policies to Utilize Vacant Sites
- Housing Choices for Diverse Population

















WHAT YOU TOLD US

ABOUT THE COMMUNITY

By listening to residents, business owners, and civic leaders, exploring the neighborhood, and understanding the strengths and challenges of the community, the project teams summarized what they heard about the community:

- It is diverse and includes a large immigrant population
- It is a residential community composed of skilled craftsmen, artists, and entrepreneurs
- It is predominantly an all-cash community with untapped and unrecognized spending power
- It is a transit-dependent population with limited access to soft goods and services
- It is a community that accommodates more than its "fair share" of very low-income subsidized housing
- It is at risk of becoming unaffordable due to adjacent rapidly gentrifying neighborhoods
- It is limited in providing housing options and choices for residents of all ages

COMMUNITY NEEDS

- Investment and legislation to protect existing residents, businesses, and neighborhood character
- Housing options to accommodate middle-income residents, extended families, youth, and relatives
- A fund to assist residents with their home improvement and repair
- A streamlined proactive process for Wayne County to transfer tax foreclosed property to the City Land Bank
- Walkable, neighborhood-serving soft goods, retail, and public services
- Improved parks with outdoor and indoor facilities for passive recreation and active sports
- Spaces for cultural events, such as Quinceañeras celebrations, performance, and artistic expression
- Multi-purpose recreational spaces that can be used as a movie theatre, bowling alley, and play rehearsals
- Expand the cultural mural program with neighborhood artists
- Low-cost maker and shared space for workshops, culinary services, tailoring, gardening, auto-repair, etc.
- Incubator spaces for encourage entrepreneurship and startup businesses
- Reliable transit options that operate long hours from early morning to late in the evening





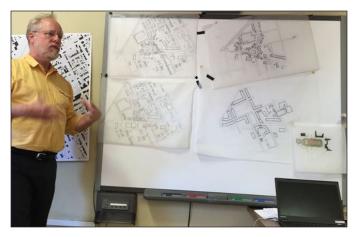






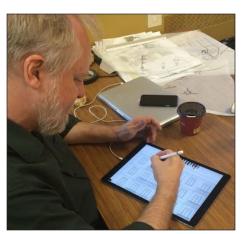












COMMUNITY CHALLENGES & ISSUES

Railroad:

- Poorly maintained viaducts, tunnels regularly flood
- Railroad tracks divide the neighborhood
- Freight depot generates abundant truck traffic

Trucks:

- Heavy truck traffic through neighborhood damages the roads, contributes to air, noise and dust pollution
- Freight truck traffic through the neighborhoods is detrimental to public safety and walkability

New Bridge to Canada (Gordie Howe Bridge):

- Community uninformed about decisions regarding the area around the bridge landing
- How will additional traffic be mitigated?
- Will more industrial and storage facilities be built?

Housing:

 Rising prices, maintenance costs, and speculative developers are making homeownership out-of-reach for existing residents

Neglected Properties:

 Abundance of tax foreclosed properties exist, with no strategy to make parcels available to potential homeowners and developers

Barriers to Services:

- Many residents cannot safely go to places outside of the neighborhood
- Many residents do not qualify for a driver license and/or credit
- Many residents cannot access public programs, services, and traditional financing

Population Diaspora:

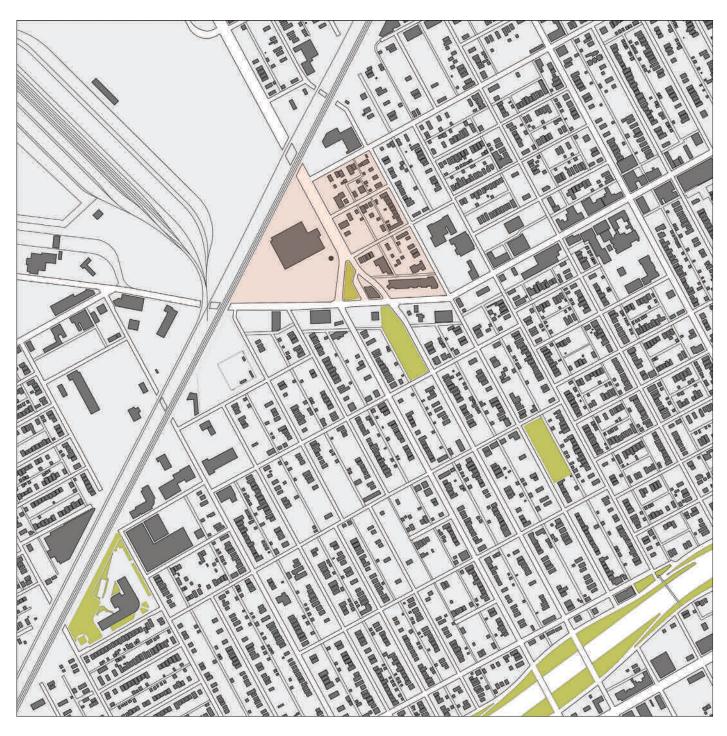
 After graduating, young residents often move outside the neighborhood to start their own families

"The air quality is terrible due to the truck traffic. I keep my house incredibly clean, but because of the constant truck fumes it always smells terrible inside."

—Southwest Resident

THE SITE

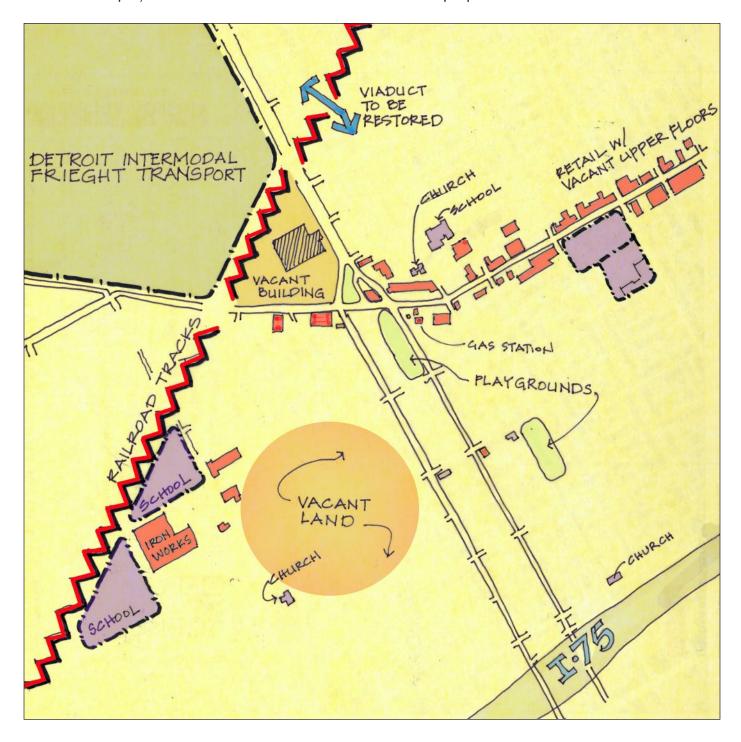
The design team studied a one-square mile surrounding the primary study area, which was centered on Livernois Avenue and Vernor Highway. The team documented and analyzed the existing infrastructure, the history of the site, land use patterns, pedestrian and vehicular circulation, commercial street frontage, vacant land parcels, vacant buildings, and previous planning studies that were done for the area. The site analysis, review, and stakeholder comments formed the framework for the urban design recommendations and strategic interventions, aimed at improving the quality of life for the residents as well as creating a place that would attract new residents, both homeowners and renters. **The Vernor Crossing area is perceived as a 'gap' between two neighborhoods to the east and west.** The primary urban design strategy is to make a place, a moment of arrival, as opposed to driving through the present condition of placelessness.



SITE ANALYSIS

The site analysis revealed the following opportunities:

- Street grids could be manipulated to make a town green public space.
- Vacant upper floors above existing retail can return to residential use, providing affordable housing.
- The adaptive reuse and renovation of the Detroit Public Works Building could support training, promote cultural events, recreation, and foster entrepreneurial activities.
- Railroad viaduct maintenance, lighting, and flooding can be addressed
- Vacant land can support a catalytic housing intervention such as a bungalow court.
- Existing residents can support additional soft goods retail and housing options
- Parks and play areas can be built on vacant tax-defaulted properties



SCHEME ONE — MASTER PLAN

Master Plan Summary: Fill-in all the vacant spaces and complete the street wall on the two arterial thoroughfares that define Vernor Crossing. A 'Town Green' is proposed at the northwest intersection of Livernois Avenue and Vernor Highway. McMillian Street is extended westward to wrap around the public space. Livernois Avenue is narrowed to 4 lanes and a linear park built in the recaptured right-of-way. The linear park is fronted by 3-story townhouses. The Detroit Public Works Building is partially demolished and renovated to serve as the arts, recreation, and cultural facility for the neighborhood. Maker spaces are incorporated into the renovation. Bivouac and Toledo Streets are extended into the 7-acre site to form manageable and developable blocks. Infill housing, parks and playgrounds are proposed for vacant lots to complete the neighborhood.







EXISTING CONDITIONS

The Southwest Detroit Business Association wishes to take control of the 60,000 sq ft Detroit Public Works (DPW) Building and its 7-acre site, which occupies the northwest corner of the Livernois Avenue and Vernor Highway intersection.

Scheme One is divided into five phases of development. The phasing schedule is influenced by the estimated absorption rate as per the target market housing study. The study suggests an absorption rate of 500 units over the next 5 years, which translates to approximately 100 units per year. The study area has three times more capacity than current demand.

PHASE ONE

Phase One includes three housing products totaling 100 dwelling units to be offered in year one:

- 1) 58 new dwelling units, in mixed-income rental residential building on the DPW site;
- 2) 12 new townhouse condominiums on the eastside of Livernois Avenue; and
- 3) 30 rehabilitated rental residential units above retail in existing mixed-use buildings along the Vernor Highway corridor.
- 4) A maximum of 12,000 square feet of street-level retail is located at the base of the mixed-use building along Livernois Avenue.

ALL PHASES	Units	Sq Ft	PHASE ONE	Units	Sq Ft
HOUSING		·	HOUSING		•
Single Family	260	_	Single Family		_
Carriage House	216	_	Carriage House		
Multi-Unit Residential	112	55,600	Multi-Unit Residential		
Townhouses	84	94,600	Townhouses	12	11,300
Mixed-Use Building	781	215,600	Mixed-Use Building	58	15,300
Renovated Flats over retail	50	_	Renovated Flats over retail	30	
Max. Number of Units	1,455		Max. Number of Units	100	
RETAIL Street Level		159,000	RETAIL Street Level		12,000





PHASE TWO

Phase Two includes partial demolition (30,000 sq ft) and renovation of the DPW Building into an arts, recreation, cultural center, and maker space.

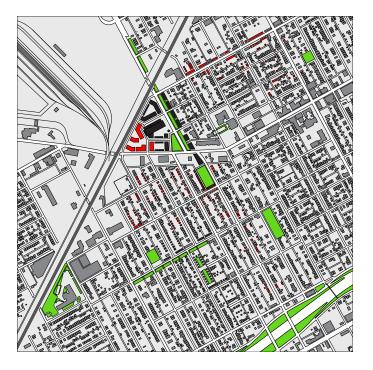
The phasing chart (below) and site plan identifies locations for 140 dwelling units, of which there is a demand for 100 units. Not all identified sites should or will be built on in Phase Two.

PHASE THREE

Phase Three starts with Livernois Avenue being transformed to a 4-lane thoroughfare, returning it to its original alignment and width. The right-of-way gained is made into a linear park.

The phasing chart and site plan identifies locations for 260 dwelling units, of which there is a demand for only 100 units. Not all identified sites should or will be built on in Phase Three.

PHASE TWO	Units	Sq Ft	PHASE THREE	Units	Sq Ft
HOUSING			HOUSING		•
Single Family	32		Single Family	55	_
Carriage House	9	4,500	Carriage House	41	_
Multi-Unit Residential	8	3,600	Multi-Unit Residential	32	16,000
Townhouses	12	12,000	Townhouses	12	12,000
Mixed-Use Building	75	20,000	Mixed-Use Building	115	31,000
Renovated Flats over retail	5		Renovated Flats over retail	5	_
Max. Number of Units	140		Max. Number of Units	260	
RETAIL Street Level		15,000	RETAIL Street Level		28,000





PHASE FOUR

In Phase Four the triangular parcel to the west of the DPW Building site is developed. If the owner of the site wished not to build on the site, there are plenty of vacant sites available to meet the demand of 100 dwelling units as identified in the target market housing study.

The existing thoroughfares to the south of Vernor Highway are extended northward to form a network within the DPW block.

PHASE FIVE

Phase Five sees the development of the southside of Vernor Highway with mixed-use, mixed-income rental buildings.

The amount of vacant land for mixed-use development, and additional affordable units such as carriage houses, far exceeds the current demand. The 500 new dwelling units added to the housing stock can be well constructed, energy efficient, and designed to make special places. The rental units need to be proficiently managed. Both these factors can instigate a revitalization process that is hungry for the supply embodied within this neighborhood.

PHASE FOUR	Units	Sq Ft	PHASE FIVE	Units	Sq Ft
HOUSING		·	HOUSING		•
Single Family	98	_	Single Family	79	_
Carriage House	82	_	Carriage House	84	_
Multi-Unit Residential	60	30,000	Multi-Unit Residential	12	6,000
Townhouses	9	9,000	Townhouses	0	0
Mixed-Use Building	56	15,000	Mixed-Use Building	128	34,000
Renovated Flats over retail	5	_	Renovated Flats over retail	5	_
Max. Number of Units	310		Max. Number of Units	308	
RETAIL Street Level		12,000	RETAIL Street Level		27,000

SCHEME TWO — MASTER PLAN

Master Plan Summary: Interrupt Vernor Highway with a rectangular 'Town Green," making a place that one arrives at, instead of a place one drives through. Livernois Avenue is narrowed to 4 lanes and the reclaimed land is used as sites for 4-story mixed use retail and residential buildings. The primary goal is to infill all vacant frontages to make a continuous street wall on Southwest's two primary streets. The Detroit Public Works Building (DPWB) is partially demolished and renovated to serve as the arts, recreation, cultural facility for the neighborhood. Maker spaces are incorporated into the renovation. Toledo, Bivouac, and McMillian Streets are extended westward, and Infantry and Casgrain Streets are extended northward into the 7-acre PBW site to form smaller blocks. Infill housing, parks and playgrounds are proposed for vacant lots to complete the neighborhood.







EXISTING CONDITIONS

The Southwest Detroit Business Association wishes to take control of the 60,000 sq ft Detroit Public Works (DPW) Building and its 7-acre site, which occupies the northwest corner of the Livernois Avenue and Vernor Highway intersection.

The site has the potential of supplying in excess of 1,800 dwelling units, without changing the character of the neighborhood. Vacant sites can be filled with single-family houses that support the existing fabric, and sites along the arterial thoroughfares can accommodate mixed-income, mixed-use buildings providing in excess of a 1,000 rental units.

ALL PHASES	Units	Sq Ft
HOUSING		
Single Family	260	
Carriage House	216	
Multi-Unit Residential	112	55,600
Townhouses	114	114,000
Mixed-Use Building	1,081	290,000
Renovated Flats over retail	50	
Max. Number of Units	1,838	

PHASE ONE

Phase One includes three housing products: 1) a new 36 units mixed-income rental residential building on the DPW building site; 2) 24 new townhouse condominiums; 3) 30 rehabilitated rental residential units above retail in existing mixed-use buildings along the Vernor Highway corridor. McMillian Street is extended westward into the site to access the townhouses.

The 90 units is shy of the 100 dwelling unit absorption rate that was identified in the target market housing study.

A maximum of 7,000 square feet of street-level retail can be provided in phase one.

PHASE ONE	Units	Sq Ft
HOUSING		
Single Family	_	
Carriage House	_	
Multi-Unit Residential	_	
Townhouses	24	20,000
Mixed-Use Building	36	9,000
Renovated Flats over retail	30	
Max. Number of Units	90	

RETAIL Street Level 231,000 RETAIL Street Level 7,000





PHASE TWO

Phase Two includes partial demolition (30,000 sq ft) and renovation of the DPW Building into an arts, recreation, cultural, and maker space. Two mixed-income rental residential buildings are constructed to the north of the DPW's building. Additional residential units above retail are rehabilitated and made available for rent. Toledo and Bivouac Streets are extended westward into the site.

Affordable single family homes are built in a cluster south of Vernor Highway to create a critical mass of development within the vacant available land.

PHASE THREE

Phase Three starts with Livernois Avenue being transformed to a 4-lane thoroughfare, returning it to its original alignment and width. The additional right-of-way gained permits the construction of two mixed-income rental residential buildings (115 units). The town green starts to takes shape, and vacant properties within the neighborhood are infilled with single-family homes, auxiliary carriage house units, duplex and four-plex buildings.

The abundant potential supply of vacant properties and underutilized sites, provides many opportunities for development in choice locations within the neighborhood.

PHASE TWO	Units	Sq Ft
HOUSING		-
Single Family	32	_
Carriage House	9	_
Multi-Unit Residential	8	3,600
Townhouses	0	_
Mixed-Use Building	75	20,000
Renovated Flats over retail	5	_
Max. Number of Units	129	

PHASE THREE	Units	Sq Ft
HOUSING		•
Single Family	55	_
Carriage House	41	_
Multi-Unit Residential	32	16,000
Townhouses	0	0
Mixed-Use Building	115	31,000
Renovated Flats over retail	5	_
Max. Number of Units	248	

RETAIL Street Level 16,000 RETAIL Street Level 24,000





PHASE FOUR

Phase Four includes the building of two mixed-income rental residential buildings (180 units) to the north and south of Vernor Highway. These buildings have street frontage retail along the primary corridor streets.

The phasing chart and site plan identifies sites for 400+ dwelling units, of which there is a demand for only 100 units. Not all identified sites should or will be built on in Phase Four.

There is an abundance of retail space opportunities within the new mixed-use building being proposed. Some of this retail space may be used as maker space as well as street-level offices.

PHASE FIVE

The triangular parcel to the west of the DPW building site is developed. The site can accommodate 300 rental dwelling units.

Mitchell Street is extended through the site as a four-lane thoroughfare to connect to Vernor Highway. This is the prelude for closing Vernor Highway and extending the town green southward to make a rational and memorable place.

PHASE FOUR	Units	Sq Ft
HOUSING		
Single Family	98	_
Carriage House	81	_
Multi-Unit Residential	60	30,000
Townhouses	_	_
Mixed-Use Building	180	50,000
Renovated Flats over retail	5	_
Max. Number of Units	424	

PHASE FIVE	Units	Sq Ft
HOUSING		•
Single Family	76	_
Carriage House	84	_
Multi-Unit Residential	12	6,000
Townhouses	48	48,000
Mixed-Use Building	300	80,000
Renovated Flats over retail	5	
Max. Number of Units	525	

RETAIL Street Level 40,000 RETAIL Street Level 64,000



PHASE SIX

A portion of Vernor Highway is closed (between Livernois and Casgrain), diverting traffic onto Mitchell Street. The rectangular town green is completed with mixed-use buildings defining its edges.

The amount of vacant land for mixed-use development, single family homes, and additional affordable units such as carriage houses, far exceeds the current demand. The 500 new dwelling units added to the housing stock can be well constructed, energy efficient, and designed to make special places. The rental units need to be proficiently managed. Both these factors can instigate a revitalization process that is hungry for the abundant supply embodied within this neighborhood.

PHASE FIVE	Units	Sq Ft
HOUSING		•
Single Family	_	
Carriage House	_	
Multi-Unit Residential	_	
Townhouses	42	42,000
Mixed-Use Building	375	100,000
Renovated Flats over retail	5	_
Max. Number of Units	422	
RETAIL Street Level		80,000



RECOMMENDATION ONE

Eliminate the freight trucks through the neighborhood

Transportation

- Restrict truck traffic through the Southwest Detroit neighborhood.
- Close Dix Street entrance to the Detroit Intermodal Freight Terminal (DIFT) center and use Livernois entrance north of railroad tracks.
- Restore the Military Road viaduct.
- Develop alternate traffic pattern to divert new traffic generated by future Gordie Howe Bridge, so that existing and additional future truck traffic does not come through the neighborhood.







(1) Close temporary Dix Street entrance and use (2) Livernois Avenue entrance, north of tracks



Restore Military Rd viaduct to augment Livernois Ave traffic, once road diet has been implemented



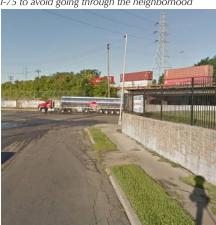
Divert traffic from Gordie Howe Bridge landing to I-75 to avoid going through the neighborhood



Truck on Livernois Avenue with Detroit Public Works Building and antenna tower.



Restore Military Rd viaduct



Livernois Avenue seen from Toledo Street with train crossing over viaduct

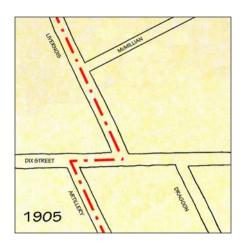
RECOMMENDATION TWO

Reconfigure streets to create a central square

Road Diet

• Place Livernois Avenue on a 'road diet' reducing number of lanes to four, two in both directions, similar to the original 1905 design.

At present Livernois Avenue is designed to accommodate heavy trucks traffic. The large curb radii and wide travel lanes are not conducive to pedestrians. To support the transformation of the Detroit Public Works Building to a community facility, it must be safely accessible by bicyclist and pedestrians. The transformation of Livernois Avenue is essential in making a pedestrian— and bicycle—friendly environment.

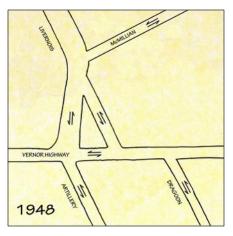


1905 Livernois Avenue

Today's Vernor Highway (formerly known as Dix Street) formed the boundary of two street grids. Livernois Avenue terminated at Vernor Highway. Two streets, Artillery and Dragoon, were off-set and continued south and terminated at the river.

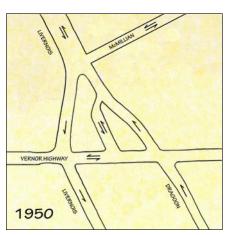
Between 1895 and 1906, the city limits of a rapidly expanding Detroit followed Livernois Avenue, extended west on Dix Street, and continued south on Artillery.

All streets in this area were originally named with a military theme.



1948 Livernois Avenue

Livernois Avenue was widened in the 1920s from its original 48' wide curb-to-curb dimension to a 90' wide boulevard, when the Michigan Central Railroad (MCRR) viaduct was constructed. To connect traffic moving north to south across Vernor Highway, a short connector was built with a 60' width to the west of the original Livernois Avenue alignment. Artillery Street was renamed Livernois Avenue creating a unified name along the corridor. This was a busy intersection in the 1940s, as the MCRR and streetcar yard occupied the northwest corner of Vernor Highway and Livernois Avenue.



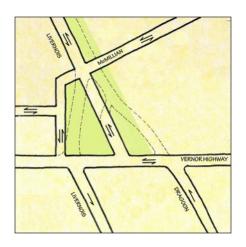
1950 Livernois Avenue

The trend in the 1950s was to convert two-way streets to one-way to increase efficiency for through traffic flow, with little concern for the impact on community life. Livernois and Dragoon were converted to a one-way couplet south of Vernor Highway. To facilitate northbound traffic, Dragoon was extended with a one-way thoroughfare to connect to Livernois.

Placemaking

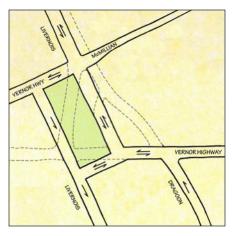
 Reconfigure thoroughfares to make a central square at the intersection of Livernois Avenue and Vernor Highway.

The confluence of several grid patterns colliding with the railroad track alignments provides an opportunity to create a Town Green. The new town green shall be adjacent to the new Arts / Recreation / Culture facility to create a destination between the two existing commercial corridors to the east and west. Three town green options are studied below.



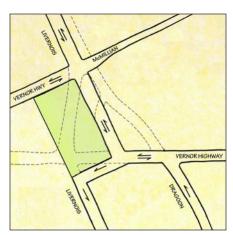
Scheme One — Livernois Avenue & Vernor Highway

The scheme proposes that Livernois Avenue (between the railroad viaduct and Vernor Highway) be returned to it original 1905 alignment and 48' width, terminating at Vernor Highway. The gained right-of-way is transformed to a linear park that traverses the neighborhood from north to south. A town green is made at the north-west intersection of Vernor and Livernois, that demarcates the center of the community, making a place of arrival. The town green is fronted by mixed-use buildings that provide a wide range of housing options, street-level retail, office space, and live-work units. The buildings are a maximum of five stories with a 60' height limit.



Scheme Two — Livernois Avenue & Vernor Highway

The scheme proposes that Livernois Avenue (between the railroad viaduct and Vernor Highway) be returned to it original 1905 alignment and 48' width, terminating at Vernor Highway. This road diet is specifically undertaken to discourage truck traffic through the neighborhood. Vernor Highway is disrupted by a town green that demarcates the center of the community, making a place of arrival. The town green is fronted by mixed-use buildings that provide a wide range of housing options, street-level retail, office space, and live-work units. The buildings are a maximum of five stories with a 60' height limit.



Scheme Two B — Livernois Avenue & Vernor Highway

Similar to Scheme Two the town green is enlarged and engaged with the western block. A pedestrian walk between the town green and new mixed-use buildings provides access to retail frontage on the park.

RECOMMENDATION THREE

Identify vacant sites for new parks

Parks & Playgrounds

• Identify vacant sites that can be transformed into parks that serve a diverse and varied age groups.

Parks have the power to transform the quality of life and stitch together the urban fabric of cities. They are democratic places that serve all members of the community who may chose to gather, relax, play, and commune with nature, improving mental and physical health. Historically great parks have promoted community engagement and helped spur economic development. Parks contribute to the happiness of citizens, strengthen communities and help sustain our cities.



2 1/2 minute walk radii from the two existing playgrounds south of Vernor Highway.



2 1/2 minute walk radii from proposed parks and



2 1/2 minute walk radii from existing and proposed parks and playgrounds.



5 minute walk radii from the two existing play



5 minute walk radii from proposed parks and play grounds.

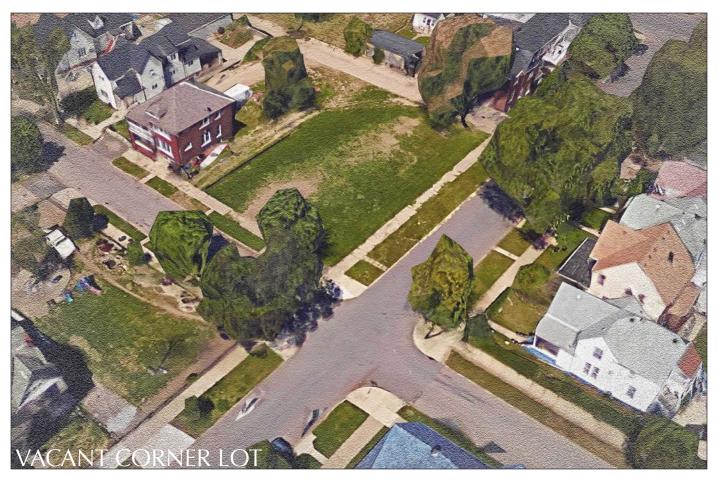


5 minute walk radii from existing and propose parks and playgrounds.

One of the two playgrounds in the neighborhood is currently being renovated to include a soccer field. It is recommended that the other playing field also be renovated to include a second soccer field, as this is a popular sport among all ages within the community.

Several smaller scale parks are proposed on vacant tax defaulted land. These parks have different programs to cater to varying age groups — from totlots to active play equipment, to basketball courts, to exercise equipment, to passive relaxation spaces for the elderly to congregate.

As the diagram on the left illustrates, the goal is to have a park or playing field within a 5-minute walk of every home in the neighborhood.

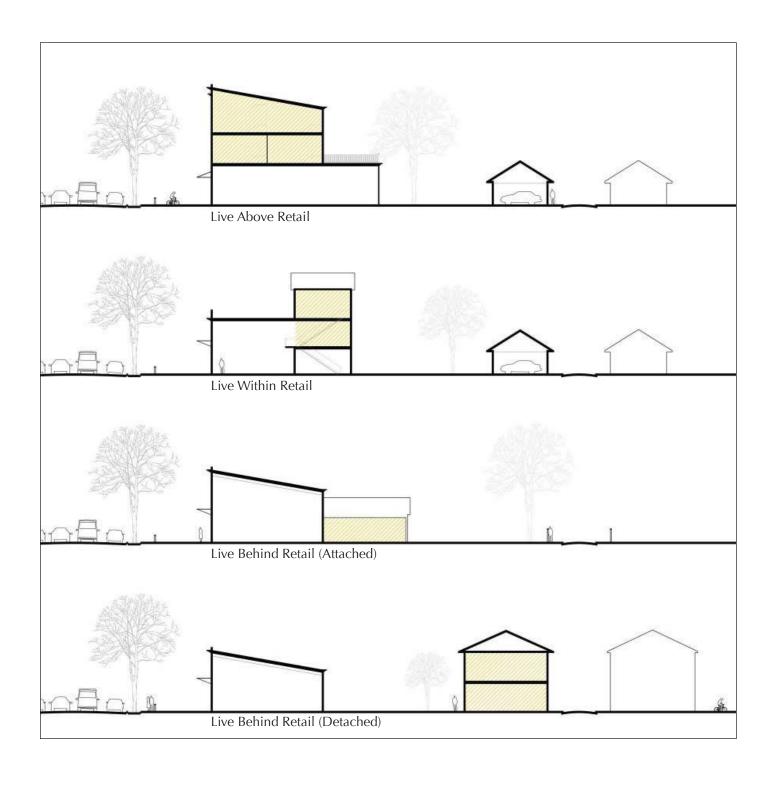




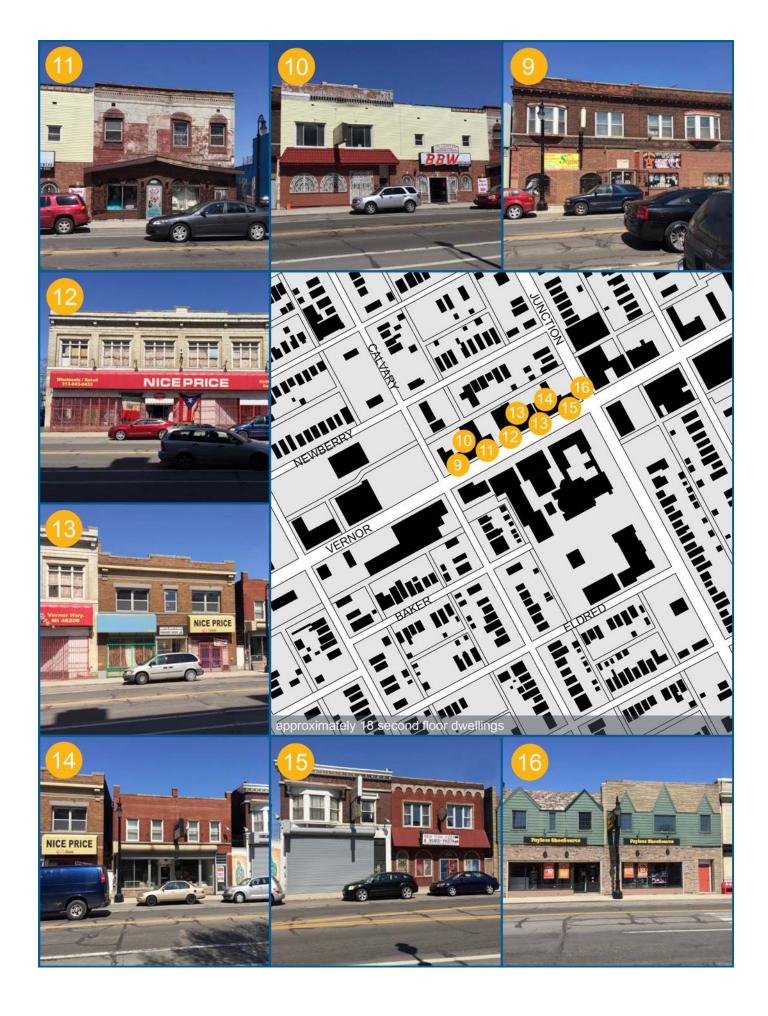
RECOMMENDATION FOUR

Encourage residential in existing upper floors of historic mixed-use building

As windshield survey suggests that there are several buildings on the Vernor Highway corridor that have retail space on street level and vacancy on upper levels. Many of these buildings used to have residential uses above retail. It may be possible to bundle these upper floor residential units and apply for Low Income Housing Tax Credit (LIHTC) as incentives for the utilization of private equity in the development of affordable housing aimed at the low-income population within the neighborhood. 24 buildings on Vernor Highway were surveyed as part of this study.









RECOMMENDATION FIVE

Use vacant city-controlled land for a variety of new housing types and markets

Prerequisite

• Streamline transfer of tax-defaulted properties to permit building of diverse housing types.

The Missing Middle refers to the range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living. These types provide diverse housing options along a spectrum of affordability, including duplexes, four-plexes, and bungalow courts, to support walkable communities, locally-serving retail, and public transportation options. Missing Middle Housing provides a solution to the mismatch between the available U.S. housing stock and shifting demographics combined with the growing demand for walkability.

- 1. CARRIAGE HOUSE: An accessory structure typically located at the rear of the property and accessed from an alley. It provides either a small residential unit or home office above the garage. This type is useful for providing affordable housing choices that can serve multi-generational needs.
- 2. BUNGALOW COURT: A type of single family residential configuration that features several small houses arranged around a central garden or courtyard. These dwelling units have their front door, porches, or their stoops facing the courtyard. Automobile and garage access is accommodated by an alley, or a common parking area. The bungalow type is an effective infill redevelopment opportunity for urban blocks or deep lots within a single family neighborhood.
- 3. SINGLE FAMILY: A small- to medium-sized detached structure that is essentially one dwelling unit. Lot widths may vary from 22' to 66' depending on the platting.
- 4. DUPLEX: A small- to medium-sized detached structure that consists of two side-by-side or stacked dwelling units, both facing the street, and within a single building massing. This type typically has the appearance of a small- to medium-sized single family house and is appropriately scaled to fit in a single family neighborhood.
- 5. TRIPLEX & QUAD: A small- to medium-sized detached structures that consist of three and four dwelling units within the single building massing. This type sometimes has the appearance of a medium- to large-sized single family house, or a small apartment building typically located on a corner lot of a residential block. The type unobtrusively affords higher density within a single family neighborhood.
- 6. ROWHOUSE: A small- to medium-sized attached structure that consists of 3 to 8 dwelling units placed side-by-side. This type is typically located within a medium density neighborhood or in a location that transitions from single-family to mixed-use.
- 7. APARTMENT HOUSE: A medium sized structure that consists of 4 or more dwelling units with one shared entry or individual entries along the front and/or side. This type has the appearance of a large house and is appropriately scaled to fit in a single family neighborhood.
- 8. COURTYARD APARTMENT: A medium- to large-sized structure that consists of multiple dwelling units. This type may have a landscaped forecourt that is open to the street, with the main entry located within the courtyard.
- 9. APARTMENT: A medium- to large-sized structure that consists of multiple dwelling units. This type is appropriately scaled to fit in medium-density neighborhoods.
- 10. COTTAGE RENTAL: A small- to medium-sized detached structure. It is intended to provide retail or service uses on the ground floor, but may also accommodate flexible or incremental uses to meet changing trends or growing business demands. The building type will typically have a residential mass, scale, and composition that allows it to integrate into adjacent residential areas.







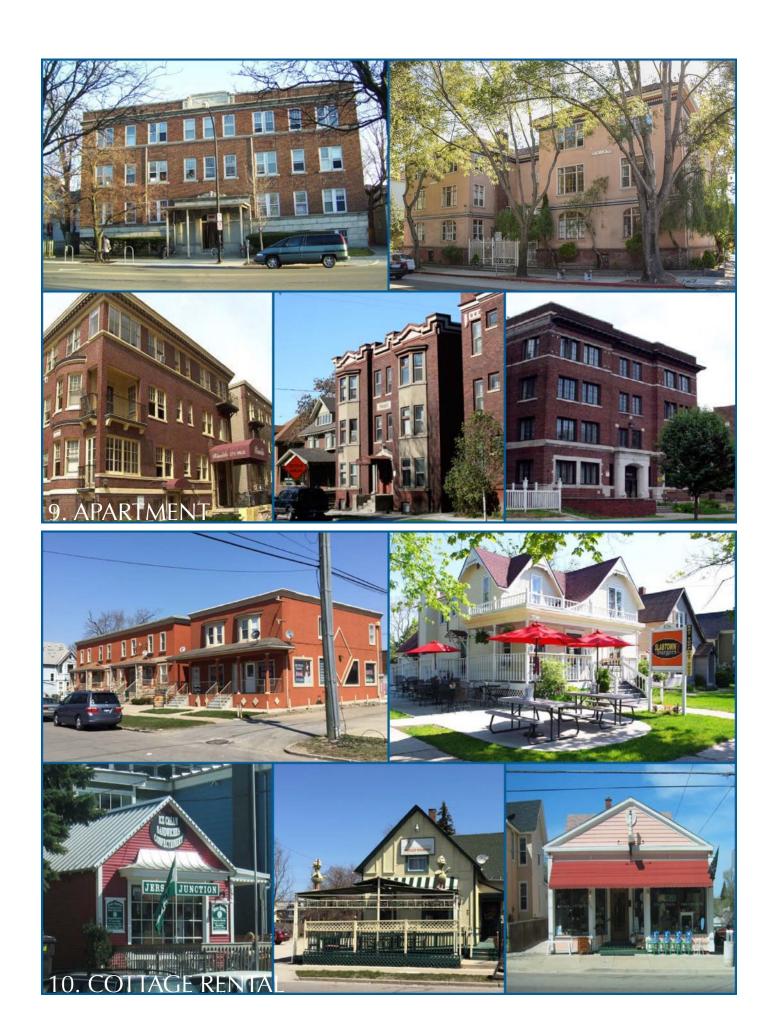
DUPLE









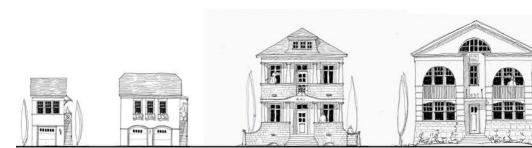


INFILL HOUSING OPPORTUNITIES

The blocks adjacent to the Detroit Public Works Building offers several opportunities for infill housing. Buildings along Military and Toledo Streets were documented to analyze the potential for infill housing and develop an understanding of building character. Elevation studies were prepared based on the local typologies. The collaged photographic strip elevation below illustrate the rich variety and robust character of the housing stock, despite being a middle-class neighborhood.



Plan of study area highlighting Toledo and Military Street



Elevations studies for infill housing, based on Detroit typological precedents



Building elevations on Military Road between McMillian and Bivouac Streets



Building elevations on Military Road between Bivouac and Military Streets



Building elevations on Toledo Road between Military Street and Livernois Avenue









RECOMMENDATION SIX

Identify opportunities to add a range of civic spaces

Public Realm

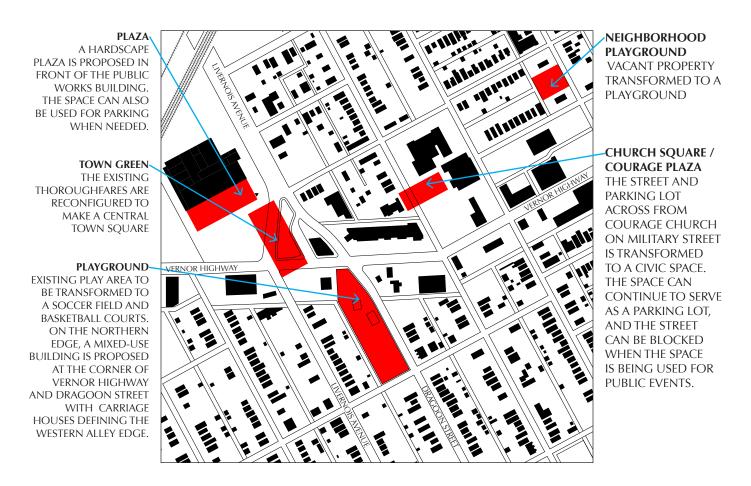
• Identify opportunities to make a diverse range of civic spaces for residents to use.

The Public realm is defined as any publicly owned streets, pathways, right of ways, parks, publicly accessible open spaces and any public and civic building and facilities. The quality of the public realm is vital for a community to retain and attract people who want to live and work in the neighborhood.

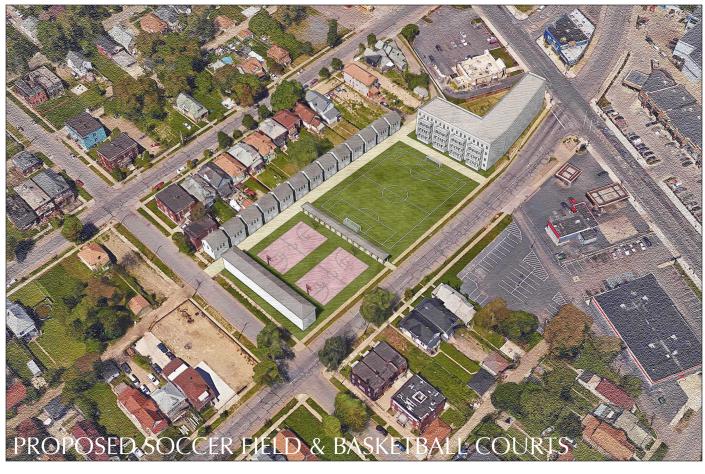
A comment that was echoed several time during conversations with residents, was the need for community gathering spaces. Local Latino culture emphasizes gathering informally outdoors to socialize and participate in active recreation, such as soccer.

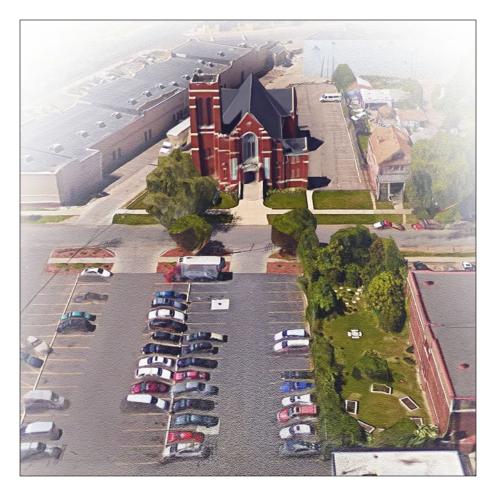
The design team identified several location for public space interventions. Five examples of public space transformations are illustrated on the following pages.

RECOMMENDED PUBLIC SPACE PLAN











CHURCH SQUARE

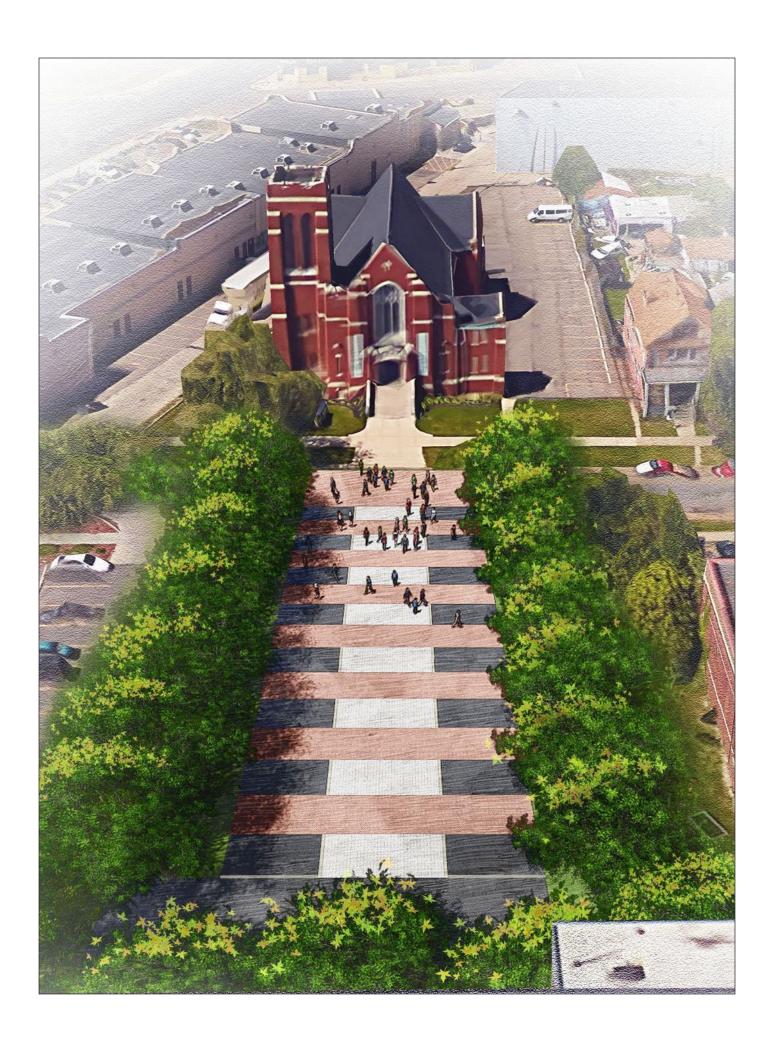
COURAGE PLAZA

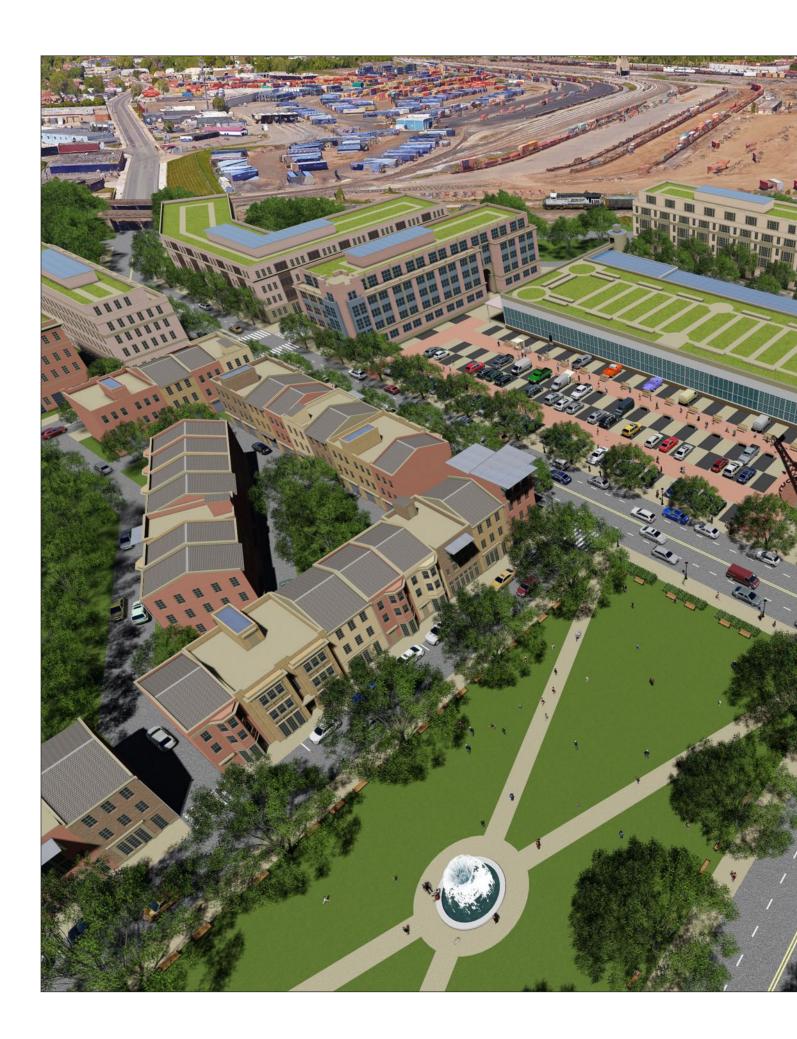
The handsome brick Courage Church on Military Street offers the opportunity to create a civic square that borrows space from the parking lot across the street, and the thoroughfare.

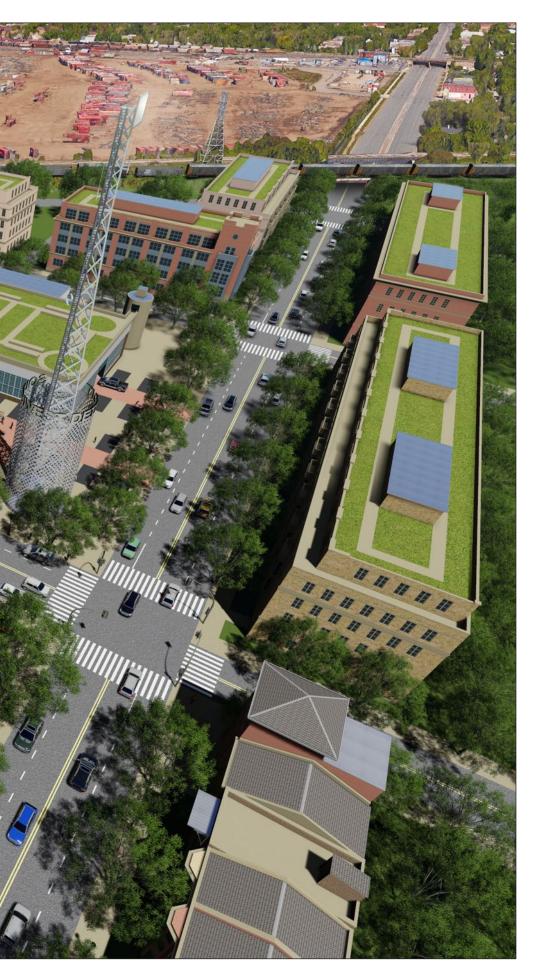
Planting trees and painting the ground surface can transform this unattractive entryway to the church into a beautiful forecourt, that is worthy of the building's architecture.

The space can be used for wedding receptions and other forms of outdoor celebrations.

When the space is not required for events it can continue to be used as a parking lot, as seen on the lower left image.







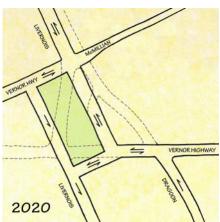
TOWN GREEN & PLAZA

The illustration shows the Town Green as proposed in Scheme Two, and the adaptive reuse of the Detroit Public Works Building (DPWB) into a arts, recreation, cultural center, and maker space.

The vast open space in front of the DPWB is designed and detailed as a public plaza. It can be used for a variety of outdoor activities, and can also be used for parking (as shown in the illustration).

The DPWB has a flat roof, which is approximately 3/4 acre in size. It is proposed that the roof be used for growing edible vegetation. Tax credits could help finance the renovation of the building. Other new buildings proposed would also have green roofs.

The illustration on the left shows Livernois Avenue transformed to 4 lanes of vehicular traffic south of the railroad viaduct. The reduction in road width helps slow traffic while approaching the town green.







RECOMMENDATION SEVEN

Transform existing antenna tower into a neighborhood landmark

Landmark

The existing antenna (seen on the two images to the right) is located along Vernor Highway on the Detroit Public Works Building site. The proposal is to transformed this functional infrastructure to a landmark beacon for Southwest Detroit. A perforated metal base is added to the tower structure along with 12' high letters announcing the neighborhood. letters can light up at night, as seen in the illustrated below.



View of existing antenna tower

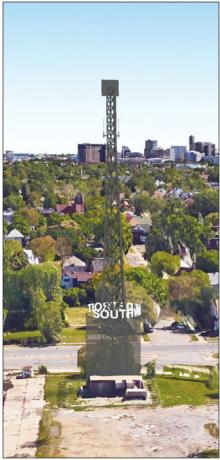




Night view of glowing letters



View of proposed base and lettering on the antenna



View of proposed base and lettering on the antenna



View of existing east elevation of the Detroit Public Works Building.



View of proposed east elevation of the Detroit Public Works Building. Building is restored, glass replaced, and large central opening into main space is maintained.

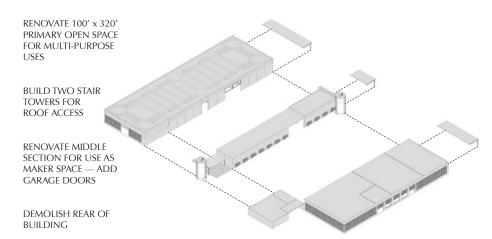
RECOMMENDATION EIGHT

Reposition the Detroit Public Works Building into a community center and maker space.

Detroit Public Works Building

The existing building is approximately 60,000 sq ft. of enclosed space. The proposal is as follows:

- 1. Demolish 25,000 sq ft at the rear portion of the building.
- 2. Renovate the main room at the front of the building which is 100' wide by 320' long. The 32,000 sq ft room is used as a multi-purpose space.
- 3. Use the remaining area along the middle of the building (shown in red) as maker space and sharing cooperative. Multiple garage doors are installed at the rear to facilitate delivery of goods.
- 4. A green agricultural roof is installed on the main portion of the building.
- 5. The addition of two stair towers with elevators are built to access the roof.





View of existing north elevation of the Detroit Public Works Building, which is be demolished



View of restored Detroit Public Works Building, with maker space along the north side (shown in red).



View of existing south elevation of the Detroit Public Works Building



View of existing south elevation of the Detroit Public Works Building



Interior view of the Detroit Public Works Building looking southeast



Interior view of the Detroit Public Works Building looking southwest

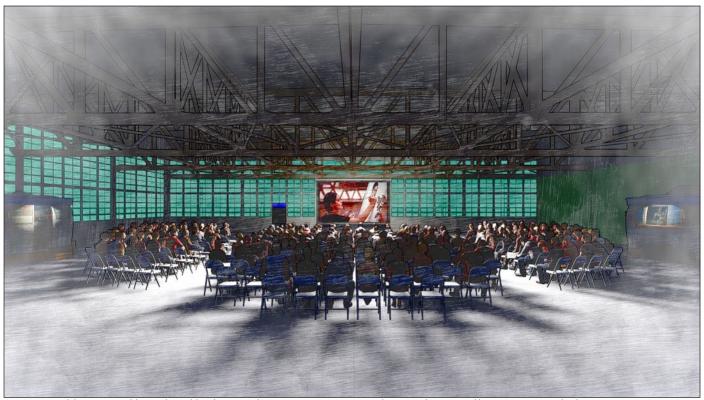


The team discussing the quality of space and light within the Detroit Public Works Building





Interior view of the Detroit Public Works Building being used as a farmers market



Interior view of the Detroit Public Works Building being used as an entertainment venue: theater performances, film premieres, recitals, dance, concerts, etc.



Plaza to the south of the Detroit Public Works Building being used for a farmers market

SUMMARY OF FINDINGS

An Analysis of Residential Market Potential

The Vernor Crossing Study Area

The City of Detroit Wayne County, Michigan

April, 2016

Conducted by ZIMMERMAN/VOLK ASSOCIATES, INC. P.O. Box 4907 Clinton, New Jersey 08809 On Behalf of The CNU Legacy Charrette Vernor Crossing Study Area Detroit, Michigan



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Research & Strategic Analysis

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Research & Strategic Analysis

SUMMARY OF FINDINGS

AN ANALYSIS OF RESIDENTIAL MARKET POTENTIAL

The Vernor Crossing Study Area
The City of Detroit, Wayne County, Michigan
April, 2016

This purpose of this study is to determine the annual market potential for new housing units—created through rehabilitation and conversion of existing buildings as well as through new construction—that could be developed over the next five years within the Vernor Crossing Study Area.

For the purposes of this study, the Vernor Crossing Study Area encompasses a one-mile radius around the city-owned parcel, situated at the intersection of Livernois and Vernor Highway, that is the primary focus of the analysis. The vacant Detroit Public Works Department building is located on the site.

The depth and breadth of the potential market for new and existing housing units within the Vernor Crossing Study Area have been derived from the housing preferences and financial capacities of the draw area households, identified through Zimmerman/Volk Associates' proprietary target market methodology and extensive experience with urban development and redevelopment.

The most recent Wayne County migration and mobility data—as derived from taxpayer records compiled by the Internal Revenue Service from 2006 through 2010 and from the 2014 American Community Survey five-year estimates for the county and the City of Detroit—shows that the areas where the potential market is likely to move from include the following:

Vernor Crossing Study Area: 38.4%
Balance of the City of Detroit: 20.2%
Balance of Wayne County: 13.3%
Oakland, Macomb, and Washtenaw Counties: 8.9%
Balance of the U.S.: 19.2%

Total: 100.0%

—Annual Market Potential for the Vernor Crossing Study Area—

As determined by the migration and mobility analyses, up to 3,310 households represent the annual potential market for new and existing housing units in the Vernor Crossing Study Area each year over the next five years. The tenure and housing preferences of those 3,310 draw area households are shown on the following table:

Housing Type	Number of Households	PERCENT OF TOTAL
Multi-family for-rent (lofts/apartments, leaseholder)	1,990	60.1%
Multi-family for-sale (lofts/apartments, condo/co-op ownership)	405	12.2%
Single-family attached for-sale (townhouses/live-work, fee-simple/ condominium ownership)	515	15.6%
Single-family detached for-sale (houses, fee-simple ownership)	400	_12.1%
Total	3,310	100.0%

The financial capabilities of the 3,310 target households, combined with their tenure and housing type propensities are detailed on the following table:

	Hous	Households	
Housing Type	Number	PERCENT	
Multi-family for-rent	1,990	60.1%	
(lofts/apartments, leaseholder) < 30% AMI	535	16.2%	
30% to 50% AMI	415	12.5%	
50% to 90% AMI	375	11.3%	
80% to 100% AMI	325	9.8%	
> 100% AMI	340	10.3%	
Multi-family for-sale	_405	_12.2%	
(lofts/apartments, condo/co-op ownership)			
< 30% AMI	30	0.9%	
30% to 50% AMI	45	1.4%	
50% to 80% AMI	85	2.5%	
80% to 110% AMI	80	2.4%	
> 110% AMI	165	5.0%	
Single-family attached for-sale (townhouses, fee-simple ownership)	_515	15.6%	
< 30% AMI	60	1.8%	
30% to 50% AMI	60	1.8%	
50% to 80% AMI	100	3.1%	
80% to 110% AMI	110	3.3%	
> 110% AMI	185	5.6%	

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Single-family detached for-sale	_400	12.1%
(houses, fee-simple ownership)		
< 30% AMI	40	1.2%
30% to 50% AMI	55	1.7%
50% to 80% AMI	85	2.6%
80% to 110% AMI	110	3.3%
> 110% AMI	110	3.3%
Total	3,310	

Note: For fiscal year 2016, the Detroit-Warren-Livonia HMFA Median Family Income for a family of four is \$66,900.

Summarizing the incomes and financial capabilities of the 3,310 target households, 20.1 percent (665 households) have incomes at 30 percent or less than the AMI; 17.4 percent (575 households) have incomes between 30 and 50 percent AMI; 19.4 percent (645 households) have incomes between 50 and 80 percent AMI; 18.9 percent (625 households) have incomes between 80 and 100 percent AMI for rental, and between 80 and 110 percent AMI for for-sale housing; and 24.2 percent (800 households) have incomes above 100 percent AMI (rental) and above 110 percent AMI (ownership).

—TARGET MARKETS—

As determined by the target market analysis, the annual potential market for new and existing housing units in the Vernor Crossing Study Area can be characterized by general lifestage and household type as follows:

- Traditional and non-traditional family households: 64.5 percent;
- Younger singles and childless couples: 25.1 percent; and
- Empty nesters and retirees: 10.4 percent.

—OPTIMUM MARKET POSITION: THE VERNOR CROSSING STUDY AREA—

The rents and price points for new housing units that could be developed within the Vernor Crossing Study Area are derived from the financial capabilities of those target households with incomes at or above 50 percent of AMI (rental) and at or above 80 percent of AMI (for-sale).

This analysis has determined that, at a minimum, 500 new housing units could be supported within the Study Area over the next five years. As derived from target market preferences, then, the appropriate mix of a minimum of 500 residential units would be as follows:

Target Residential Mix: 500 New Housing Units

HOUSING TYPE	PERCENT OF TOTAL	Number of Units
Multi-family for-rent (lofts/apartments, leaseholder)	60.1%	300
Multi-family for-sale (lofts/apartments, condo/co-op ownership)	12.2%	62
Single-family attached for-sale (townhouses/live-work, fee-simple/ condominium ownership)	15.6%	78
Single-family detached for-sale (detached houses, fee-simple ownership)	12.1%	60
Total	100.0%	500

The optimum market position for up to 500 new *mixed-income* rental and for-sale housing units within the Vernor Crossing Study Area is summarized on the following table:

Base Rent, Price and Size Ranges

HOUSING TYPE	RENT/PRICE RANGE	Size Range	RENT/PRICE PER SQ. FT.
Multi-Family For-Rent—			
50 Apartments over Retail (Renovated units in upper floors on Vernor)	\$550-\$650/month	500–600 sf	\$1.08-\$1.10 psf
150 Mixed-Income Buildings (New construction)	\$750-\$1,350/month	550–1,150 sf	\$1.17-\$1.36 psf
100 Rental Townhouses (New construction)	\$1,225-\$1,425/month	1,100–1,400 sf	\$1.02-\$1.11 psf
MULTI-FAMILY FOR-SALE—			
62 Condominiums (Renovated units in existing small rental build	\$90,000-\$130,000 ings)	800–1,200 sf	\$108-\$113 psf

SUMMARY OF FINDINGS: AN ANALYSIS OF RESIDENTIAL MARKET POTENTIAL

Page 5

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SINGLE-FAMILY ATTACHED FOR-SALE—

78 Townhouses/Duplexes (New construction)

\$130,000-\$155,000

1,100-1,400 sf

\$111-\$118 psf

SINGLE-FAMILY DETACHED FOR-SALE—

60 Detached Houses

\$135,000-\$175,000

1,000-1,450 sf

\$121-\$135 psf

The proposed rents and prices are in year 2016 dollars and are exclusive of location or consumeradded options or upgrades.

The 150 rental units in mixed-income buildings (of which 65 percent are market-rate) should be located on the site itself; the 50 apartments over retail should be renovations of upper floors of the retail buildings that line Vernor Highway; and a portion of the 100 rental townhouses should be located on the site, and the remainder, which would be designed to be rent-to-own, should be located on specified infill sites in the Study Area, as per the Legacy Charrette Master Plan.

Acquisition and renovation of many of the smaller multi-unit buildings that are scattered throughout the Study Area will provide units that could be purchased as condominiums. There is a market for 62 of these renovated units in renovated buildings located throughout the Study Area; these conversions will add to the ownership options available in the Study Area.

The 78 for-sale townhouses/duplexes are proposed as new construction, and, like the rental townhouses, a portion could be located on the site and the remainder on specified infill sites in the Study Area, as per the Legacy Charrette Master Plan.

The 60 for-sale detached houses are proposed as both new construction and renovation of existing houses that are located on the same block as the newly-constructed houses. All of these houses are located on specified infill sites in the Study Area, as per the Legacy Charrette Master Plan.

—MARKET CAPTURE—

After more than 28 years' experience in various markets across the country, and in the context of the target market methodology, Zimmerman/Volk Associates has determined that an annual capture of up to 10 percent of the potential market for new rental housing and up to five percent of the potential market for each for-sale housing type is achievable. (Nationally, until the 2008 housing collapse, newly-constructed dwelling units represented 15 percent of all units sold.)

The forecast annual absorption of each housing type, based on the aforementioned market capture rates, is shown on the following table:

Housing Type	Forecast Absorption
Multi-family for-rent Apartments over retail Rental townhouses Apartments in mixed-income buildings	$\frac{104}{10}$ 20 74
Multi-family for-sale Units in renovated small buildings	<u>12</u>
Single-family attached for-sale Townhouses	<u>15</u>
Single-family detached for-sale Detached houses	<u>11</u>

Absorption of a minimum of 500 new mixed-income dwelling units within the Vernor Crossing Study Area could be achieved within approximately five years. Based on the forecast absorption paces outlined above, the 150 rental units to be built on the site could be absorbed in approximately two years. Because of the strong absorption of these units, the Legacy Charrette Master Plan has incorporated additional multi-family rental buildings, containing approximately 50 units each, located on Vernor Highway and across from the site on Livernois.

These housing type-specific capture rates are well within the parameters required for feasible development. The target market capture rates of the potential renter/purchaser pools are a unique and highly-refined measure of feasibility. Target market capture rates are not equivalent to—and should not be confused with—penetration rates or traffic conversion rates.

The target market capture rate is derived by dividing the annual forecast absorption by the number of households that have the potential to move to the site in a given year.

The **penetration rate** is derived by dividing the total number of dwelling units planned for a property by the total number of draw area households, sometimes qualified by income.

The traffic conversion rate is derived by dividing the total number of buyers or renters by the total number of prospects that have visited a site.

Because the prospective market for a property is more precisely defined using target market methodology, a substantially smaller number of households are qualified; as a result, target market capture rates are higher than the more grossly-derived penetration rates. The resulting higher capture rates remain within the range of feasibility.

—SUMMARY OF METHODOLOGY—

The proprietary target market methodology developed by Zimmerman/Volk Associates is an analytical technique, using the Nielsen (formerly Claritas) PRIZM household clustering system to determine the extent and characteristics of the market for new housing in a given area, and the optimum market position that responds to market preferences.

The technical analysis of market potential for housing in the Vernor Crossing Study Area included delineation of the draw areas—based on the most recent migration data from the Internal Revenue Service for Wayne County, and incorporating additional data from the 2014 American Community Survey for the county, the City of Detroit, and the Vernor Crossing Study Area.

The evaluation of market potential for the Study Area was derived from target market analysis of households in the draw areas, and yielded:

- The depth and breadth of the potential housing market by tenure (rental and ownership); by type (apartments, attached and detached houses); and by income (below 30 percent AMI, between 30 and 50 percent AMI, between 50 and 80 percent AMI, between 80 and 100 percent AMI for rental units, and 80 and 110 percent AMI for for-sale units, and above 100 percent AMI, for rental units, and 110 percent AMI, for for-sale units).
- The composition of the potential housing market by lifestage (empty-nesters/retirees, traditional and non-traditional families, younger singles/couples).

Demographic and geo-demographic data obtained from the Nielsen Company provide the framework for the categorization of households, not only by lifestage and demographic

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characteristics, but also by lifestyle preferences and socio-economic factors. The methodology groups clusters of households (usually between 10 and 15) according to a variety of significant "predictable variables," ranging from basic demographic characteristics, such as income qualification and age, to less-frequently considered attributes known as "behaviors," such as mobility rates,

lifestage, and lifestyle patterns.

Mobility rates detail how frequently a household moves from one dwelling unit to another.

Lifestage denotes what stage of life the household is in, from initial household formation (typically when a young person moves out of his or her parents' household into his or her own dwelling unit), through family formation (typically, marriage and children), empty-nesting (after the last adult child has left the household), to retirement (typically, no longer employed).

Lifestyle patterns reflect the ways households choose to live, *e.g.*—an urban lifestyle includes residing in a dwelling unit in a city, most likely high-density, and implies the ability to walk to more activities and locations than a suburban lifestyle, which is most likely lower-density and typically requires an automobile to access many, if not most locations.

Zimmerman/Volk Associates has refined the analysis of these household clusters through the correlation of more than 500 data points related to housing preferences and consumer and lifestyle characteristics.

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