

CARNEGIE STATION

PARK AND RIDE GARAGE ALTERNATIVES

FINAL REPORT OVERVIEW

GARAGE PLACEMENT



OPERATIONS



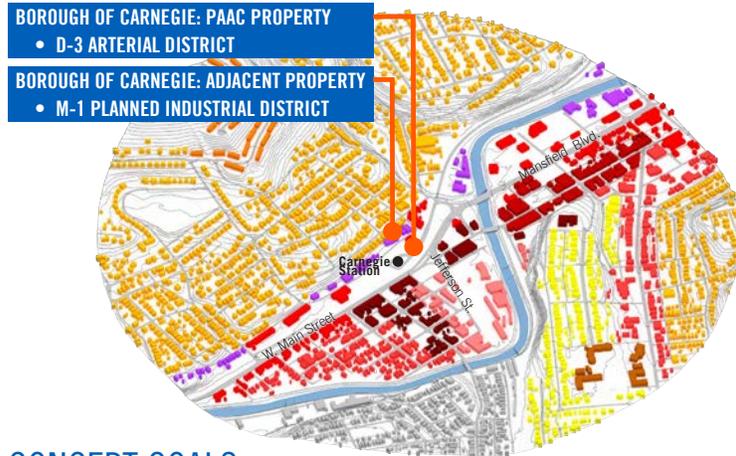
TOD FEASIBILITY



PORT AUTHORITY OF ALLEGHENY COUNTY
PLANNING DEPARTMENT

PURPOSE

This project completed planning work at the Carnegie Station Park-and-Ride (PNR) site. Three locations for a new parking structure at the PNR were evaluated, while also exploring feasible and appropriate scenarios for nearby transit-oriented development (TOD). Through coordination with the public and relevant stakeholders, a letter of interest and review of developer responses, and an analysis of ways to incorporate sustainable design into the overall program, the garage scenarios were reduced to a single, preferred option which was advanced to conceptual (10%) design.



CONCEPT GOALS

GARAGE PLACEMENT

OPERATIONS

TOD FEASIBILITY

The rendering shows a modern multi-story building with large glass windows and a flat roof. In front of the building is a plaza with trees and a bus stop. Several red buses are parked at the bus stop. The building is situated on a street corner with other buildings in the background.

CONTEXT

The Port Authority of Allegheny County (PAAC) has secured Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding (\$6.5 million) to pay for construction of a new parking garage at the Carnegie Station. The existing parking lot is in high demand and the 2010 West Busway TOD Assessment and Plan called for a new parking garage on the site of the PNR lot. The recommendations in the TOD report also called for first level retail space, upper floor space for offices for educational and cultural institutions, and new residential units along Logan Street.

In November of 2018 a market analysis memorandum was completed, to assess the market potential for TOD at the Carnegie Station site and to also look at potential development strategies for the parking structure and potential associated development. As part of the analysis, real estate indicators relevant to the development process were analyzed to determine the feasibility of mixed-use, pedestrian friendly, commercial and residential land uses.

Following the 2018 market analysis, the Authority pursued conceptual design of the Carnegie Station park and ride to determine an optimal location of the new parking structure and establish a site plan for future TOD and enhanced Authority operations. In order to accomplish the goals of CMAQ, the Authority reviewed options to mitigate traffic while constructing the garage to accommodate a final parking quantity of 415 total spaces. Through this review, alternative methods of congestion mitigation were outlined to allow for future site uses, such as TOD, which could potentially share parking resources. Three site configurations were identified as part of the original memorandum and analyzed to determine a final preferred option to move into engineering.

Garage Placement: Review of 3 potential placements of the garage within the existing property constraints.

- Option 1: Garage placement directly over existing bus layover loop with ground level of garage containing a redesigned bus layover area.
- Option 2: A stand alone garage placed adjacent to the Carnegie Borough Building with a redesign of the existing operations facility.
- Option 3: A single level garage spanning 3/4 the total Authority property, with a shared ground level parking and bus layover operations facility.

Operations: Improve layover and station facilities.

- Consider operational adjustments needed to construct a new parking structure.
- Maximize layover capacity to accommodate existing and future needs.
- Enhance staff and driver amenities as part of the overall site development.
- Consider future electric fleet with potential fast charging layover areas.

TOD Feasibility: Develop site to allow for future transit-oriented development.

- Develop a plan that would allow for potential TOD.
- Consider the attractive frontage of West Main Street and Mansfield Boulevard.
- Create a consistent and active frontage for the Borough of Carnegie.
- Promote mixed-use design solutions that are accessible to the community.

RECOMMENDATIONS

Garage Placement

The preferred option of a stand alone garage, adjacent to the Carnegie Borough building, was selected through the feedback of community members, leaders, and Authority staff. Some contributing factors for this decision include:

- Ease of construction phasing that would minimize operational interferences
- Design of flat decks with high ceilings to allow for potential future conversion opportunities
- Allows for the opportunity of public spaces throughout the site, in the form of small plazas and dining areas
- Enhances overall site connectivity through clear pedestrian and vehicular routes
- Includes green infrastructure systems
- Promotes a safe environment for station and future TOD users
- Establishes a continuous frontage along W. Main Street
- Provides land for future TOD investment that meets the local market
- Conceals layover operations to the rear of the sight, along Logan Street

Operations

As development of a new parking structure occurs, potential improvements to the station operations are able to be performed. These enhancements include:

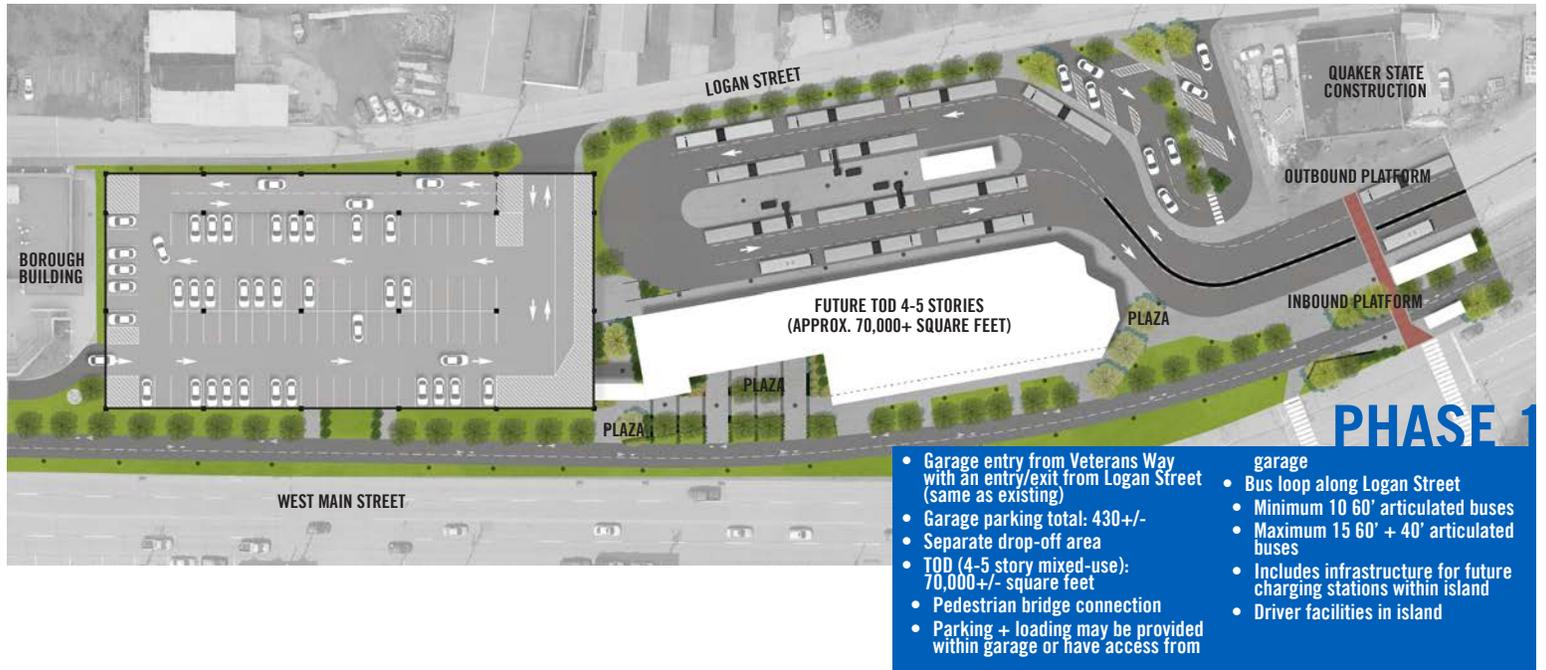
- Expanded layover facility to accommodate 11-15 Authority buses
- Infrastructure needs for a future electric fleet
- New driver comfort facilities
- Relocated layover facilities to allow for continuous street activity along W. Main Street
- Allows for future connection to W. Main Street at the intersection of 3rd Street with minimal infrastructure changes

TOD Feasibility

The proposed mixed-use plan includes the following key elements:

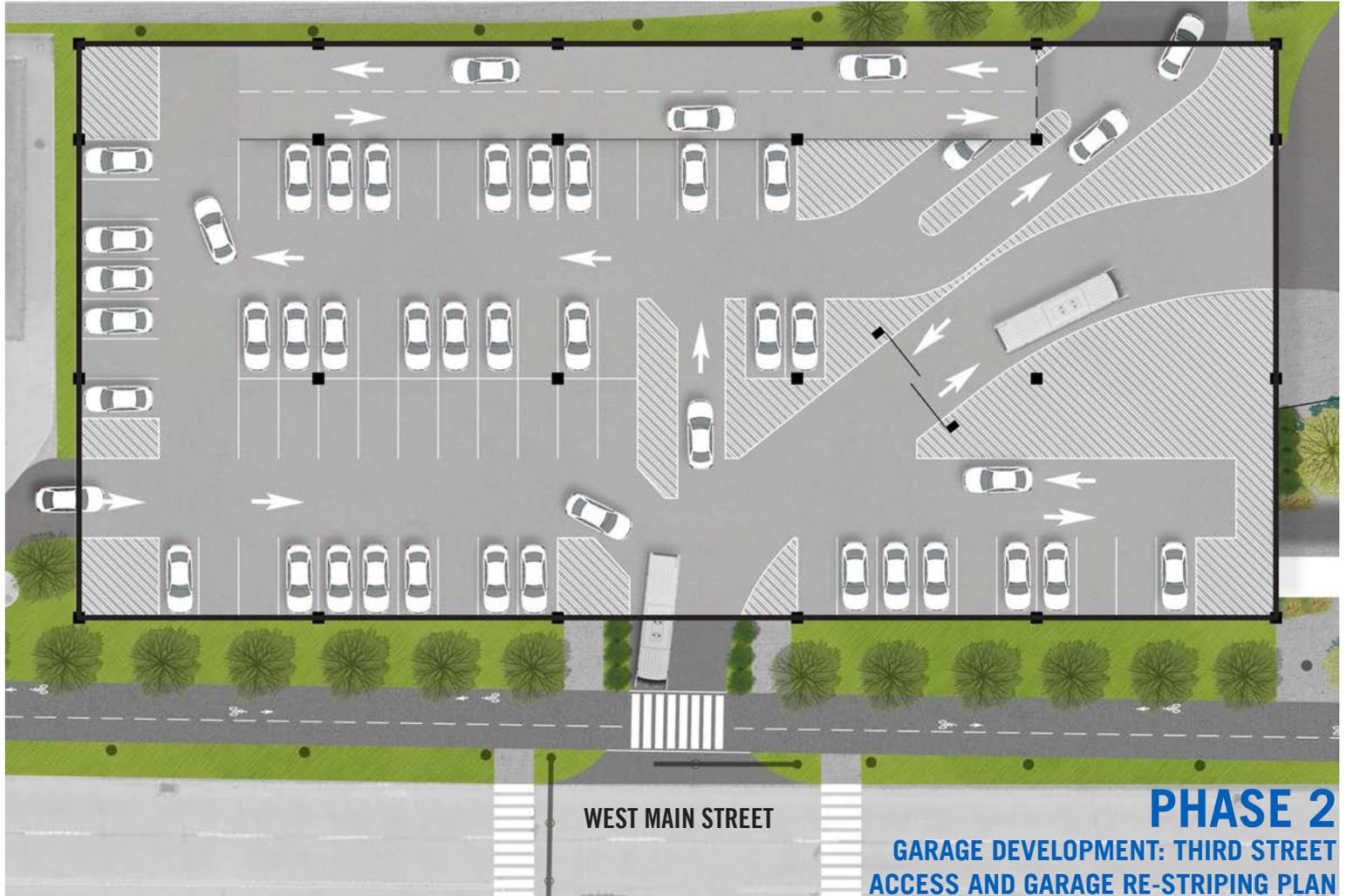
- A four- to five-story structure, both to fit in with existing building patterns and to provide enough density to ensure economic feasibility.
- A mix of uses viable for the community, such as residential and a mix of retail or commercial spaces on ground floor to provide an active frontage along W. Main Street.
- The opportunity to include a pedestrian bridge connecting the future TOD to the proposed parking structure.

CONCEPT DESIGN PHASES



IMPLEMENTATION OVERVIEW

PAAC has prepared the overall site development plan for Carnegie Station park and ride. The concept plan for the station area and new parking structure have been developed into 10% Design Development plans. The Authority will proceed to next steps for this plan and move the concept to engineering for further development of construction documents. The Authority is likely able to meet the goal of the CMAQ funding and produce a net increase of 200 spaces to the park and ride through the construction of a new parking structure. Full site implementation may be dependent upon having a land lease(s) by future TOD and may not take place within the first phases of site development.



COST ANALYSIS

As detailed in the CMAQ application, the proposed budget for full buildout (Phases 1 and 2) of the project includes the \$6.5 million grant plus matching funds from state transit and other government sources, totaling \$13.0 million. The cost of the conceptually designed garage is about \$9.2 million, with the total project amounting to roughly \$13.3 million to \$13.8 million. This is for a basic level of construction of a parking garage, without estimated costs for engineering or construction management, demolition, agency coordination, or other potential soft costs. With engineering and construction management costs added, the project total is anticipated to exceed \$15.0 million. Not only does this cost opinion exceed the proposed budget, but it does not allow for constructing any “premium” features, such as architectural façade components,

solar arrays, or accommodating the infrastructure needs of future conversion of the garage into a new use, such as residential or office space. Therefore, it may be necessary to add the TOD site features at a later date, which may be possible through consideration of potential income from developer lease(s) at the Carnegie PNR site. We do acknowledge that the Southwestern Pennsylvania Commission’s and Allegheny County’s West Busway Transit-Oriented Development Assessment and Plan calls for TOD on site. However, the primary focus of the CMAQ Candidate Project Description was adding 200 new spaces at the PNR lot by constructing a parking garage, and the proposed budget will likely cover the costs of installing the garage itself to accomplish the CMAQ goals.

PortAuthority