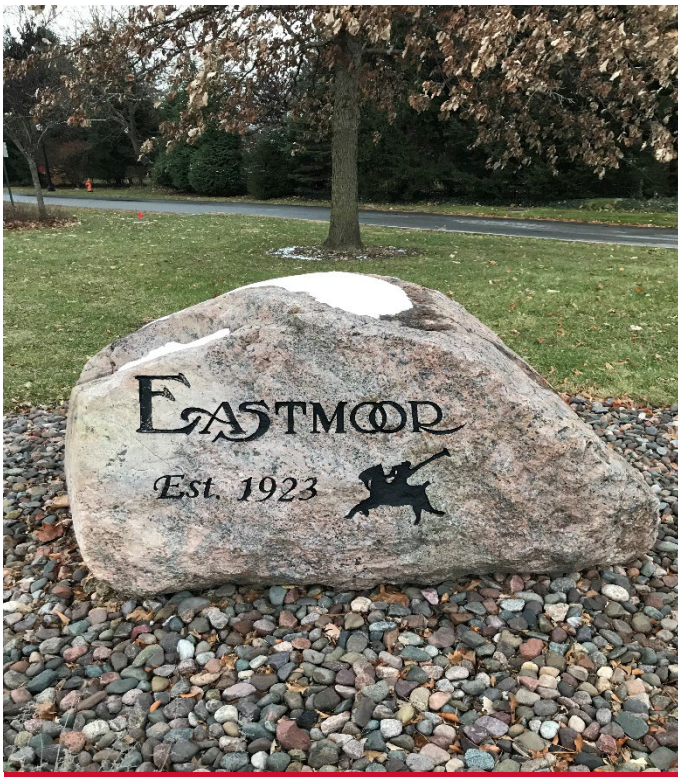

Final Preferred Alternative

Eastmoor Blvd Safety & Mobility Improvements

City of Columbus

Columbus, OH

September 2, 2022

Prepared by consultant team of HDR, Burgess & Niple, and OHM

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Introduction

This document presents the preferred alternative for the Eastmoor Blvd corridor. The goal of this Corridor Improvement project is to improve the safety for all users of Eastmoor Blvd and provide more options for active transportation users.

The previously submitted Existing Conditions Report provided an overview of the existing conditions of the project study area based on the data compiled. It was known that vehicle speeds were a major concern of area residents. The majority of 311 service requests (SRs) from recent years focused on speeding and intersection configurations, specifically that of Eastmoor Blvd and Fair Ave. The speed data collected by the project team shows that speeding is indeed an issue along the Eastmoor Blvd corridor.

The utilization of the curbside parking space is low and indicates that there are opportunities to explore potential alternative uses for this existing right-of-way.

Existing pedestrian and bicycle infrastructure on the Eastmoor Blvd corridor is limited although the nearby E Main St corridor currently has sharrows to facilitate bicyclists. The project team has considered connections to nearby points of interest, such as schools, existing sidewalk and bicycle infrastructure, and nearby bus stops.

The Alternatives and Decision Matrix deliverable presented two potential alternatives to address the Eastmoor Blvd corridor safety and mobility improvements as well as a decision-making tool that could be referenced when choosing an alternative. The City reviewed these alternatives and worked with the project team to create public-facing exhibits to be used for the public engagement efforts associated with the project. The decision matrix can be used to evaluate the effectiveness of the alternatives at addressing the needs of the community. The decision matrix considered decision criteria that included Implementation/Cost, Multimodal Connectivity, Speeding Safety Improvement, Crash Safety Improvement, and Public Feedback. Through an iterative planning and engagement process, a hybrid solution is proposed as the preferred alternative.

Public Involvement

A presentation was given during a meeting held by the Eastmoor Civic Association at the Bexley Public Library to collect feedback from the community. The attendees were given an overview of the existing conditions, corridor analyses, and the alternatives developed by the project team.

Attendees responded positively to the idea of the installation of medians and speed humps on the Eastmoor Blvd corridor. It was determined that the proposed solution should not impact the curb. For a number of years, residents have expressed a strong desire to install stop signs on east and west legs of the Eastmoor Blvd and Fair Ave.

Decision Matrix

A decision matrix is a popular and effective tool used in the conceptual stages of engineering design to determine the strongest alternative. This strategy evaluates alternatives by rating the success of each option in meeting a series of relevant decision criteria.

Decision criteria were determined by considering the overall goals of the Eastmoor Blvd Corridor Improvements project. Decision criteria for the alternatives analysis are listed below.

Implementation/Cost: This decision criteria evaluates the ease of implementation of the alternative as well as the order of magnitude of the cost of the materials and labor required.

Multimodal Connectivity: The multimodal connectivity refers to the effectiveness with which the alternative enhances pedestrian and bicycle connectivity.

Speeding Safety Improvement: This decision criteria refers to the direct impact that the proposed solution has on the safety of the roadway environment by effectively reducing the speed of vehicles traveling along the corridor.

Crash Safety Improvement: This decision criteria refers to the direct impact that the proposed solution has on the safety of the roadway environment by reducing the likelihood of serious crashes between vehicles, pedestrians, and cyclists.

Public Feedback: This decision criteria refers to the public acceptance of the proposed solution.

In order to apply a decision matrix, each alternative is rated for each decision criteria based on a pre-determined scale. The total score for each alternative is the sum of the ratings of all the decision criteria. Equal weight has been given to all five decision criteria. The alternative solutions are rated in the decision matrix below using the following scale:

1. ***Fair***
2. ***Good***
3. ***Best***

The decision matrix developed by the project team is shown in **Table 1**. Based on public input, a hybrid solution was created as the Preferred Alternative. The Preferred Alternative is discussed in subsequent sections of this document.

Table 1. Decision Matrix

				Preferred Alt		
Decision Criteria	Weight	Alternative 1	Alternative 2	Short Term	Med Term	Long Term
Implementation/Cost	1	2	3	3	3	2
Multimodal Connectivity	1	1	2	3	3	3
Speeding Safety Improvement	1	3	1	2	3	3
Crash Safety Improvement	1	2	1	2	2	3
Public Feedback	1	2	2	2	2	3
Total		**10**	**9**	**12**	**13**	**14**

Preferred Alternative

The preferred alternative for the Eastmoor Blvd corridor was developed based upon feedback from the City of Columbus staff as well as input from the Eastmoor residents. The preferred alternative includes three potential phases, as described below. An exhibit of each phase has been included with this memo and these exhibits should be referenced for more information regarding the preferred alternative. It should be noted that project funding for the medium- and long-term recommendations contained in this memo has not been identified and therefore this future work is not an automatic next step after the short-term recommendations are implemented. Funding for these recommendations will need to be acquired through competitive grant programs, City of Columbus Urban Infrastructure Recovery Fund (UIRF) applications, and/or future capital budget requests. The Eastmoor residents and City staff will work together in the future to identify funding, likely from a combination of these funding sources, in order to construct the medium- and long-term recommendations.

Short-Term Recommendation: Pavement Markings with Striped Medians

Phase 1 includes the installation of pavement markings along Eastmoor Blvd, as shown in the Phase 1 Exhibit. Phase 1 consists of the following:

1. The placement of white edge lines for a standard 11 foot lane width along Eastmoor Blvd in both directions to delineate the vehicle travel lanes from the parking/pedestrian/bike area.

2. The placement of white edge lines at the intersections indicated to define and reduce the intersection size. **Figure 1** shows some of the proposed pavement markings from the Short-Term Exhibit of the preferred alternative for the Eastmoor Blvd corridor.

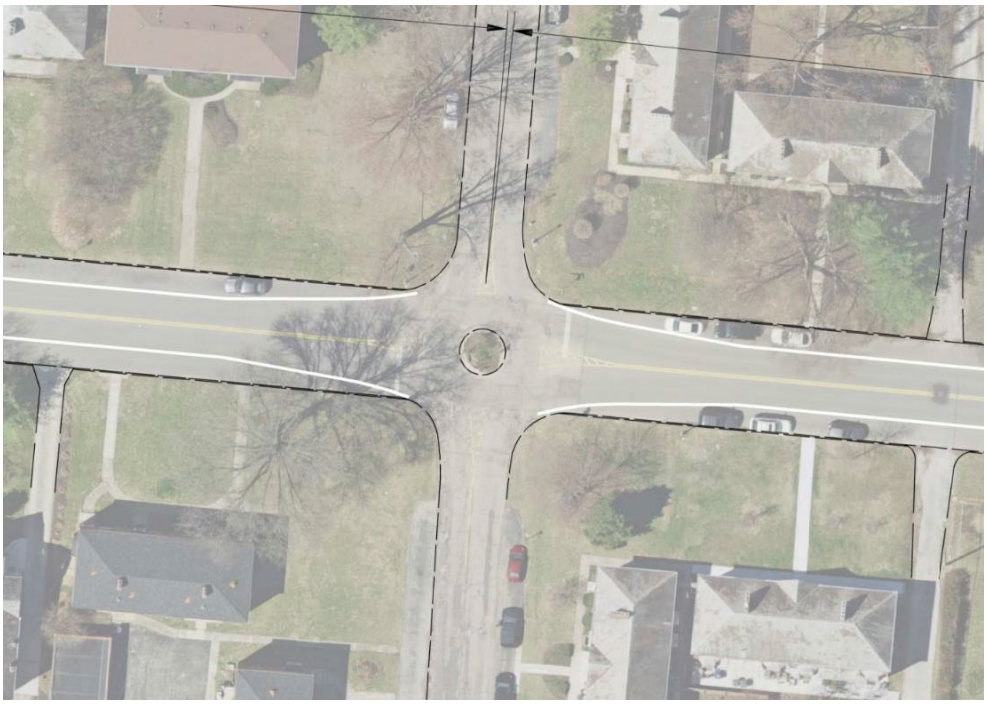

Figure 1. Example of Proposed Pavement Markings on Eastmoor Blvd

3. The modification of yellow centerline striping along Eastmoor Blvd to add delineated painted medians with transverse lines. A detail of the proposed painted median is shown in **Figure 2**.

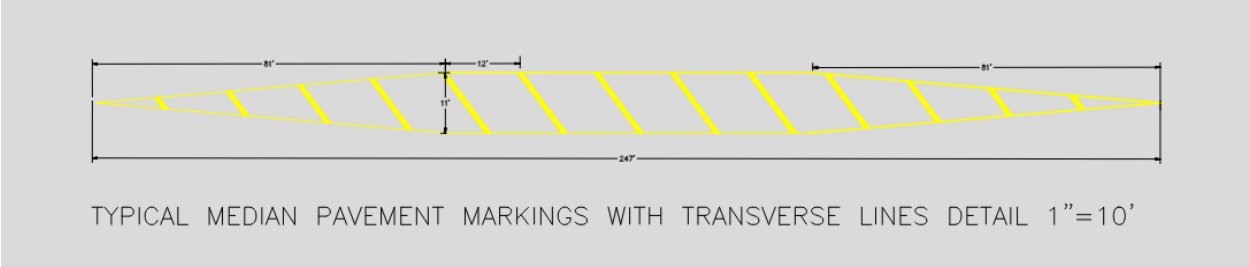

Figure 2. Detail of Proposed Median Pavement Markings

Medium-Term Recommendation: Speed Humps

The medium-term recommendation includes the installation of nine (9) speed humps along the Eastmoor Blvd corridor. Additional details, including the specific locations and spacing of the proposed speed humps, can be found in the Medium-Term Exhibit included as an attachment to this memo. The proposed speed humps are similar to those used on nearby Gould Rd, shown in **Figure 3**. (As mentioned previously, no funding sources or implementation timeline have been identified for this recommendation.)

Figure 3. Example of Speed Hump on Nearby S Gould Rd

Long-Term Recommendation: Raised Medians

The long-term recommendation includes the installation of four (4) raised traffic calming medians along the Eastmoor Blvd corridor. Additional details, including the specific locations and spacing of the proposed medians, are shown on the Long-Term Exhibit of the attached Eastmoor Blvd Preferred Alternative Roll Plot. (As mentioned previously, no funding sources or implementation timeline have been identified for this recommendation.)

Figure 4 shows a detail of a typical median proposed to be installed on the Eastmoor Blvd corridor. **Figure 5** shows a plan view of a proposed median. It should be noted that a 14-foot minimum width is maintained between curb faces to meet the City's required minimum width for snowplow operation.

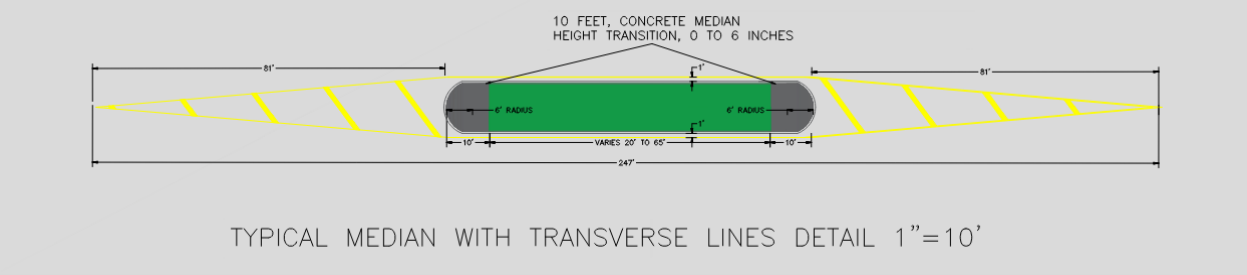

Figure 4. Detail of a Typical Median Proposed for the Eastmoor Blvd Corridor

Figure 5. Plan View of a Proposed Median on the Eastmoor Blvd Corridor

Cross Sections

Figures 6 and **7** show cross sections for the preferred alternative for the Eastmoor Blvd corridor. **Figure 6** shows the cross section at a proposed median. As mentioned above, a 14-foot minimum width is maintained between curb faces to meet the City's required 14-foot minimum width for snowplow operation. **Figure 7** shows a cross section with two lanes of travel and two parking lanes.

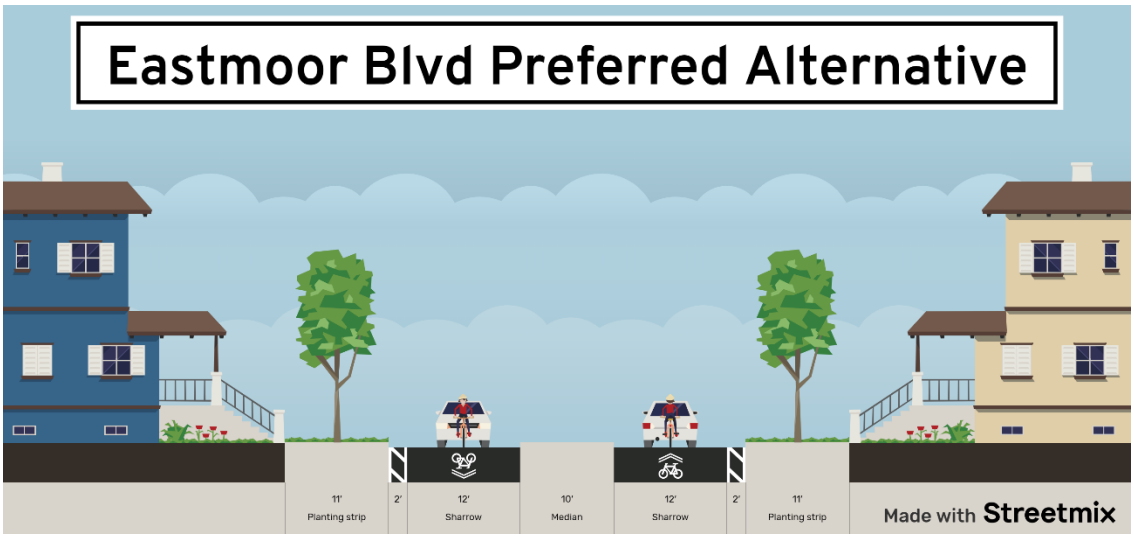

Figure 6. Cross Section of Preferred Alternative – Median

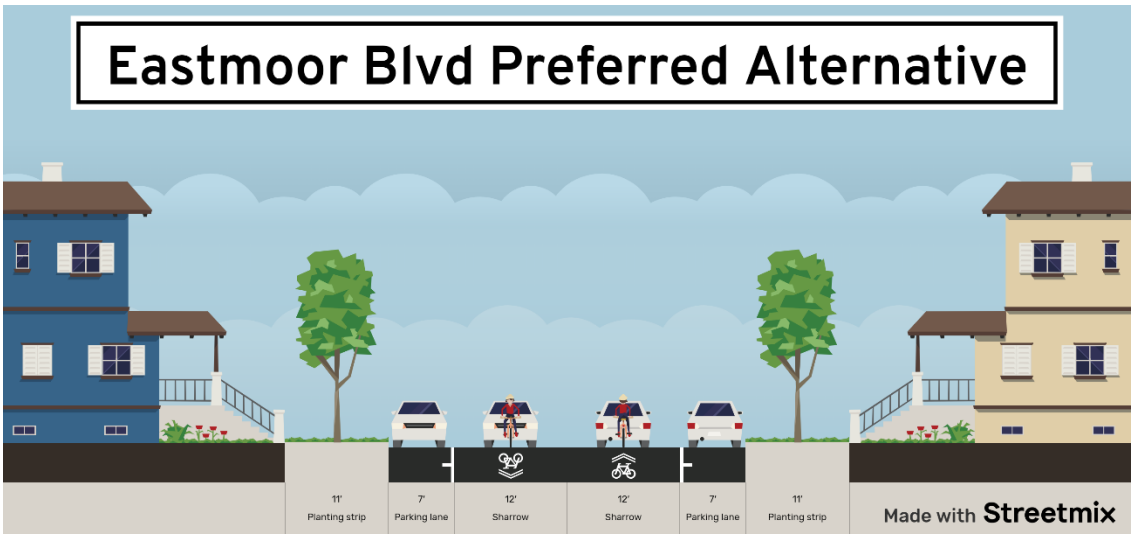

Figure 7. Cross Section of Preferred Alternative - Parking

Conclusion

This phased approach to the improvement of Eastmoor Blvd allows the City to provide the community with an immediate benefit at a low cost. The first phase focuses on making impactful changes to the allocation of the roadway width through the use of pavement markings. Subsequent analysis is built into the preferred alternative to test the impact on the Eastmoor Blvd corridor's travel speeds. Through that process, more robust improvements can be made over time as needed or desired. This preferred alternative provides solutions for multiple levels of potential funding and addresses the decision criteria developed for the decision matrix as well as the most pressing concerns voiced by the community through 311 service requests and public involvement efforts.