

Eastman Avenue Study: Status Report and Future Direction

Prepared for:



Prepared by:



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1.0 INTRODUCTION

This report was prepared to provide an update to the Midland City Council (City Council) regarding the Eastman Avenue Traffic Study (EATS). As a result of public input received during the winter of 2005/2006, Midland City staff have identified a recommended process for additional study which is described in this report. This report contains the following main sections: Background Information; Potential Interim Solutions; and Recommended Next Steps.

2.0 BACKGROUND

The EATS was a study conducted by the City of Midland in order to evaluate the possible need for road improvements along Eastman Avenue from just south of Wackerly Street to just north of Commerce Drive and along Joe Mann Boulevard from Eastman Avenue to Jefferson Avenue. It also included the intersection of Jefferson Avenue and Wackerly Street and the U.S. Route 10 (US-10) ramps. Although they were assessed in the EATS, Joe Mann Boulevard and the intersection of Jefferson Avenue and Wackerly Street are not included as part of this report because the City first wanted to address the biggest problems and determine the effects of Eastman Avenue on the other locations. The EATS was undertaken during the summer and fall of 2005 by DLZ Michigan, Inc. (DLZ) under contract with the City of Midland.

In December 2005, DLZ reported back to City Council the findings of the study. The study showed that the main problems along Eastman Avenue occur at the intersections with Wackerly Street, Joe Mann Boulevard, and Airport Road.

DLZ presented to the City Council and the citizens of Midland four alternatives that would provide long-term (i.e., 20-year) solutions to the traffic problems in the project area. The improvements included:

- Alternative 1 – Boulevard with Signalized Intersections
- Alternative 2 – Narrow Boulevard with Roundabouts
- Alternative 3 – One-way Pair with Signalized Intersections
- Alternative 4 – “No Build” Alternative

Through a five-week (December 2005 – January 2006) written and on-line survey process, City staff solicited the public’s input on which alternative was most desirable, what the public felt were the advantages and disadvantages to each alternative, and whether or not the public believed that road improvements should be undertaken at this time or postponed to a future date. The findings of the public input process have been summarized in a report prepared by the City’s public involvement consultant (KezziahWatkins) in the report entitled *Citizen Response to Alternatives, Eastman Avenue Traffic Study Report*. About seven hundred responses were received. The results showed:

- A slightly greater number of people indicated a preference to proceed with improvements to Eastman Avenue than expressed a preference to postpone;
- The proceed/postpone division was significant with considerable numbers on both sides;
- Although respondents indicated important advantages and disadvantages to each alternative, no clear preferred alternative was expressed; and



- Many respondents expressed an interest in finding other approaches to traffic problems indicating a desire for lower cost improvement alternatives somewhere between doing nothing and the more extensive long-term (20-year) improvements that were presented.

It is this last item that led to the present report and City staff's recommendation for consideration of additional road improvement options.

3.0 POTENTIAL INTERIM SOLUTIONS

In response to the public input, City staff (at the direction of City Council) decided to investigate potential interim (i.e., five- to ten-year time horizon) solutions that cost less than the original alternatives in the EATS. In an attempt to find a lower-cost interim solution, DLZ reviewed, categorized, and analyzed hundreds of ideas submitted by the community regarding Eastman Avenue. It was decided that any interim solution carried forward would eventually be compared to Alternatives 1 through 4 as one or more additional alternatives. City staff determined that a responsible interim solution that could be seriously considered would need to meet the following criteria:

1. Allow the City additional time to consider longer-term options while helping to relieve current traffic problems;
2. Be completed at a lower cost than the three build alternatives proposed in the EATS;
3. Be practical and make a noticeable difference in traffic operations on Eastman and in the Midland Mall area; and
4. Complement any proposed longer-term traffic improvements.

Many concepts suggested during the public input process were eliminated because they did not meet one or more of these requirements. For example, improved signal timing or access management (e.g., changes to driveway conditions, locations, etc.) would not likely make a noticeable difference in traffic operations. As a further example, other concepts were eliminated because they were not cost effective or had limited long-term potential (i.e. they would only improve the situation for a few years and would need to be completely replaced by other measures).

Based on the survey results, City staff and DLZ evaluations, and the above noted criteria, the following elements are being recommended for further evaluation as potential interim solutions:

1. Partial construction/phased implementation of Alternatives 1 – 3
2. New Full Interchange at Waldo Road
3. "Smart" Signal Systems with improvement to signal timings
4. Access Management in conjunction with other options

These elements are described in more detail in the following sections.

3.1 Partial Construction/Phased Implementation of Alternatives 1, 2, or 3

This potential solution would consist of building portions of Alternatives 1, 2, or 3 from the EATS as part of a phased-in process. A brief initial assessment indicates that while Alternatives 1 and 2 could likely be phased, it may be more difficult to use this approach with Alternative 3 since it would require construction of an entire new southbound road in order to address existing intersection problems. Phasing of Alternative 1 could consist of constructing new turn lanes at problem intersections. As part of this strategy, shifting Airport Road to the north to align with the mall entrance and eliminate a signal phase



may also be investigated. Alternative 2 could consist of constructing roundabouts only with no improvements between intersections. It is also likely that a reduced number of lanes could be implemented as an interim solution until traffic volumes increase in the future.

3.2 New Full Interchange at Waldo Road

This potential solution would create a full interchange at Waldo Road and US 10. A full interchange at Waldo Road would improve traffic operations on Eastman Avenue by diverting some traffic to the Waldo Road interchange. Additionally, as Eastman Avenue becomes more congested, additional traffic would divert to the Waldo Road interchange. With assistance from the Michigan Department of Transportation (MDOT), which has a considerable role in permitting an interchange at this location, a full interchange option could be studied in greater detail to determine the number of vehicles that could divert from Eastman Avenue. As part of a previous study (US-10 at Waldo Road Interchange Study, 2004), MDOT developed numerous options for the Waldo Road interchange, all of which were relatively expensive. We believe that a lower cost option may be feasible, and this would be examined as part of the study.

During the public involvement process, other interchange locations were recommended. These other locations are not acceptable, as they would violate MDOT and Federal Highway Administration policy for interchange spacing.

3.3 "Smart" Signal System/Improvement to Signal Timings

This potential solution would consist of a "smart" signal system such as the Sydney Coordinated Adaptive Traffic System (SCATS) used by the Road Commission for Oakland County. A smart signal system could improve intersection operations and will be investigated in further detail. A smart signal system would involve installing cameras at main intersections linked to central computers that perform real-time computer analysis, leading to continuously optimized signal timing/coordination.

3.4 Access Management

The final potential interim solution is access management. Access management is a group of strategies, tools, and techniques that work to limit and consolidate access along major roadways. The goal of access management is to limit and locate access points to reduce conflicts, increase safety, preserve road capacity, and improve traffic operations. Access management includes techniques such as new service/frontage roads, rear access drives, eliminating curb cuts along Eastman Avenue, combining driveways, prohibiting left turns along Eastman Avenue, etc. Access management recommendations along Eastman Avenue would provide some relatively minor benefits to mid-block flow, but would not improve the intersections that are the main problem. Access management is not viewed as a stand-alone solution but could be included as part of an overall interim solution.

4.0 RECOMMENDED NEXT STEPS

In order to identify a practical solution for the Eastman Avenue corridor, the following steps are recommended:

1. Develop potential interim solutions and conduct technical analyses
2. Present new information to City Council
3. Present new information to the public and solicit input
4. Present results to City Council



As part of the study, it is recommended that three public sessions be held in September/October 2006 to gather public input. Participation in this "Eastman Avenue Design Series" (EADS) would be open to all Midland citizens. In order to participate, participants will be required to enroll/register well ahead of time, commit to the full schedule of sessions, and agree to do any "homework"/preparatory work asked. There will be no limit on the number of participants.

The three sessions would consist of presentation by City staff and the consultant team (DLZ and Kezziah Watkins), questions and answers, small group work, and group consensus on a solution for Eastman Avenue. Any improvements made to the Eastman Avenue Corridor will need to:

- Adequately address current traffic needs, while also complementing any future improvements that may be required.
- Be fiscally responsible, while providing a significant level of traffic improvement for the dollars expended.
- Balance the needs of business owners in the corridor with the needs of the traveling public.
- Be pedestrian and bicyclist-friendly.
- Achieve a good match between the level of "fix" and the level of the traffic problems that exist now and are projected in the future.

After the EADS and careful evaluation of all technical information, City staff will report back to City Council to recommend a Preferred Alternative. Possible recommendation may include one or more of the following:

- Alternative 1 – Boulevard with Signalized Intersections
- Alternative 2 – Narrow Boulevard with Roundabouts
- Alternative 3 – One-way Pair with Signalized Intersections
- No Build
- Postpone Decision
- Phase-in of Alternatives 1,2, or 3
- One or more elements of a potential interim solution as described in Section 3