

MEMORANDUM

TO: Mayor and City Council

FROM: Howard S. Lazarus, City Administrator

DATE: June 14, 2019

SUBJECT: Ann Arbor Quiet Zone Assessment Report and next steps

Based on requests from citizens, the City studied the feasibility of establishing a Quiet Zone within the City of Ann Arbor along the Ann Arbor Railroad. Seven scenarios were developed in total: five total lengths; and two phased approaches. The cost to establish a Quiet Zone for the entire length ranges from \$6.6 to \$7.9M. A survey which gauged the interest in these scenarios garnered 697 responses. The public overwhelmingly supported (73%) <u>no</u> further action/investigation. If the City wishes to pursue further action, the report outlines next steps. Staff seeks direction if this project should be pursued further.

Background:

Residents in two residential areas along the Ann Arbor Railroad (AARR) corridor have raised concerns to the City about train-horn noise: (1) adjacent to the downtown and Old Fifth Ward area, and (2) in the Northside neighborhood, north of Argo Pond. Federal Railroad Administration (FRA) regulations require sounding a locomotive horn near such crossings unless they are in an FRA-designated Quiet Zone. The Quiet Zone rules require a safety evaluation and, potentially, public-safety improvements before any area may be designated a Quiet Zone.

The City investigated options to improve safety and minimize the impacts of train horn noise at multiple at-grade highway-rail crossings along the AARR. The FRA's Train Horn Rule, issued in June 2005, provided both the opportunity and requirements to accomplish this objective. The Train Horn Rule specifies the procedures and actions necessary to establish a train horn quiet zone for at-grade highway-rail crossings.

The first requirement for cities seeking to implement a Quiet Zone is ensuring that each public crossing within the proposed Quiet Zone is equipped with the minimum requirements of entry gates and flashing lights with power-out indicators as well as constant warning time (CWT) detectors where reasonably practical. Only one crossing, Dhu Varren Road, is currently equipped with these warning devices. The remaining crossings would need to be upgraded.

Once the minimum warning device requirements are to be met, the FRA then evaluates potential quiet zones using its risk prediction and assessment calculation.

Quiet Zone Study

The City retained SRF Consultants to study the corridor and make recommendations. SRF outlined a process consistent with the FRA rules for establishing and implementing an FRA compliant Quiet Zone. The following outlines the key steps:

- A. Study area identified,
- **B.** Diagnostic meeting and corridor inventory completed. This included including representatives from FRA, Michigan Department of Transportation (MDOT), AARR and other key stakeholders,
- C. Developed Alternative Improvement scenarios for each at grade crossing
- D. Drafted a report for public review

A. Study Area:

The project study are included all at grade street crossings along the AARR corridor from S. State Street to Dhu Varren Road. There are 21 public and 2 private crossings along this segment of the railroad system.

B. Diagnostic Meeting and Railroad Coordination

A diagnostic meeting was held on October 3rd, 2018, with representatives from the City of Ann Arbor, MDOT, FRA, AARR and the two private crossing owners. The diagnostic meeting minutes are provided in Appendix A of the final report (attached). At each crossing, the diagnostic team evaluated the site conditions evaluating safety issues and identify potential crossing improvements. Further coordination with the railroad was conducted to provide estimated costs for warning device upgrades at each crossing.

The potential for crossing closures, which would reduce overall project costs and increase corridor safety, were considered but will need to be weighed against the negative impacts to traffic circulation and property access if closings are to be pursued.

The team also identified potential for utility conflicts at multiple crossings. Development of detailed cost estimates for utility relocation were beyond the scope of the study and will need to be developed through further coordination between the railroad and the utility provider. As such, each improvement scenario's cost estimate includes a utility contingency to account for the uncertainty with this aspect of the quiet zone implementation.

C. Crossing Improvement Scenarios Developed

Multiple crossing improvement scenarios are available which would allow for the implementation of one or more Quiet Zones in the City. Various crossing improvement scenarios were developed by selecting individual crossing improvement options described in the report. The options were selected to achieve a specific goal for each scenario such as selecting options that result in the highest levels of safety or selecting only the most cost-effective scenarios while leaving others with only the minimum crossing signal upgrades. Documentation of the Quiet Zone risk calculations is included in the final report's Appendix B (attached).

Each scenario identified in Table 1, below, includes estimated costs for upgrading the railroad crossing signals, the estimated roadway costs associated with each improvement, a contingency for potential utility relocation or modification, and estimated annual maintenance costs based on guidance from MDOT's online railroad crossing annual maintenance estimates.

Table 1. Crossing Improvement Scenarios (descriptions of these scenarios are discussed in the report starting on page 37)

Improvement Scenario	Signal Costs	Roadway Costs	Utility Contingency	TOTAL	Annual Maintenance Costs
Scenario 1: Signal Upgrades Only	\$5,200,000	\$2,000	\$1,440,000	\$6,642,000	\$39,000
Scenario 2: Cost Effective	\$5,200,000	\$474,000	\$1,440,000	\$7,114,000	\$39,000
Scenario 3: Cost Effective with One Closure	\$4,950,000	\$474,000	\$1,360,000	\$6,784,000	\$37,000
Scenario 4: Cost Effective with Two Closures	\$4,650,000	\$442,500	\$1,280,000	\$6,372,500	\$35,000
Scenario 5: High Safety	\$5,400,000	\$1,047,700	\$1,440,000	\$7,887,700	\$39,000
Scenario 6: Phased, North	\$1,800,000	\$166,000	\$560,000	\$2,526,000	\$14,400
Scenario 7: Phased, South	\$3,400,000	\$308,000	\$880,000	\$4,588,000	\$24,600

D. Public Input:

The City sought public input on the scenarios recommended in the Final Report, as presented in Table 2, below. The Quiet Zone Assessment Final Report and a two question survey were posted on the City's web page from February 13, 2019 through March 15, 2019. Question 1 allowed respondents to identify a preferred scenario. Question 2 provided an open comment field to collect more in-depth understanding about the respondents' preferences. 697 complete surveys were recorded and one comment was received via email.

Table 2. Survey Reponses

Quiet Zone Survey Response		Response Percent	Response Count
Scenario 1: Gates and Signals upgrade only, no closures.	Estimated Cost - \$6.6 million	5.5%	38
Scenario 2, 3, or 4: Cost Effective and Safer, no closures.	Estimated Cost – up to \$7.1 million	8.0%	56
Scenario 5: Highest Safety, no closures.	Estimated Cost \$7.9 million	8.2%	57
Scenario 6 and 7: Phased Implementation, no closures.	Estimated Cost \$ 2.5 million plus \$4.6 million	5.5%	38
I accept the impact of train horn noise and recommend no further investment.	No investment costs	72.9%	509

Additionally, the City received 449 detailed general comments in response to question 2. 116 were supportive of a Quiet Zone; while 333 comments did not support advancing a Quiet Zone.

Next Steps

If the City wishes to pursue the Quiet Zone further, the final report identifies the following next steps:

- 1. **Notice of Intent:** The first step in the quiet zone implementation process is the submittal of a Quiet Zone Notice of Intent (NOI) to the FRA, AA Railroad, MDOT, private crossing owners, and any other applicable stakeholders. The NOI outlines the proposed crossing improvements the City intends to use to qualify for quiet zone implementation. All recipients of the NOI are allowed 60 days to provide comment.
- 2. **Quiet Zone Application:** Many of the proposed improvements described in this report include the use of Alternative Safety Measure (ASM) improvements. When ASM improvements are used, a Quiet Zone Application must be submitted to the FRA following the NOI 60-day comment period. The Application is subject to a minimum 60-day comment period for all stakeholders and must then be approved by the FRA. It is estimated that the FRA will take nine to twelve months to complete to complete this review.
- 3. **Request for CWT Requirement Waiver:** During the diagnostic review, it was noted that some crossings—specifically S Main Street and E Madison Street—may have difficulty with CWT detection upgrades. The City and AA Railroad have the option of jointly filing a request to the FRA to waive the CWT requirement at this crossing.
- 4. **Construct Improvements:** Once the Quiet Zone Application has been approved, the City may begin construction of the proposed crossing improvements. The City must also install advance warning signs and pavement markings conforming to the MUTCD standards, including the installation of "No Train Horn" signs to notify the public that train horns will no longer routinely sound at these crossings. Installation of the warning device upgrades will need to be coordinated with AA Railroad.
- 5. **Notice of Establishment:** Once the proposed improvements have been constructed, the City must then submit a Quiet Zone Notice of Establishment (NOE) to the FRA and all applicable stakeholders. The railroad must cease the routine sounding of horns 21 days after the submittal of this final notice.

Staff awaits further direction if the City should draft and file a Notice of Intent (NOI) with the FRA. Doing so would require the City to outline the area nominated for a Quiet Zone, the type of investments to be implemented and the timing of the implementation actions. To properly prepare and complete an upto-date NOI would require additional resources. Funding is needed to update traffic count information at all crossings and complete the FRA application. Additional resources would need to be allocated to support the effort to compile the application, coordinate with the FRA, MDOT and the AARR as the process would advance.

Attachments:

Ann Arbor, Michigan Quiet Zone Assessment, Final Report Survey responses

cc: J Fournier

R Hess

S Higgins

C Hupy

N Hutchinson

Ann Arbor, Michigan Quiet Zone Assessment

FINAL

City of Ann Arbor, Michigan



January 2019

SRF No. 11295

Table of Contents

Executive Summary	iii
Introduction	1
Study Purpose and Background	1
Minimum Warning Device Requirements	1
Quiet Zone Risk Calculations	4
Reducing Risk Below National Average	5
Reducing Risk Below Existing Levels	5
Types of Crossing Improvements	6
Wayside Horns	6
Diagnostic Meeting	8
Crossing Closures	8
Potential Utility Conflicts	8
Constant Warning Time Waiver	9
Crossing Improvement Options	10
S State Street (000209V)	12
Private Crossing (000211W)	13
E Hoover Avenue (000212D)	14
Hill Street (000209V)	15
E Madison Street (000209V)	16
S Main Street (000209V)	17
Private Crossing (000216F)	18
W Jefferson Street (000218U)	19
Ashley Street (000219B)	20
Ashley Street (000219B)	21
William Street (000220V)	22
S First Street (000221C)	23
W Liberty Street (000223R)	24
W Summit Street (000228A)	25

Wright Street (000231H)	26
Longshore Drive (000232P)	28
Pontiac Trail (000233W)	29
Bowen Street (000234D)	30
Traver Road (000235K)	32
Barton Drive (000236S)	33
Traver Road (000239M)	34
Dhu Varren Road (000240G)	36
Crossing Improvement Scenarios	37
NSRT Threshold	37
Scenario 1: Signal Upgrades Only	37
RIWH Threshold	39
Scenario 2: Cost Effective	40
Scenario 3: Cost Effective with One Closure	42
Scenario 4: Cost Effective with Two Closures	43
Scenario 5: High Safety	44
Phased Implementation	45
Scenario 6: North of Summit	45
Scenario 7: Summit and South	45
Improvement Scenario Summary	46
Next Steps and Implementation Timeline	47
Appendix A: Diagnostic Meeting Minutes	49
Appendix B: Baseline Quiet Zone Risk Calculations	50

Executive Summary

The City of Ann Arbor, Michigan (the City) is investigating options to improve safety and minimize the impacts of train horn noise at multiple at-grade highway-rail crossings throughout the community. The Federal Railroad Administration's (FRA's) Train Horn Rule, issued in June 2005, provides an opportunity to accomplish this objective. The Train Horn Rule specifies the procedures and actions necessary to establish a train horn quiet zone for at-grade highway-rail crossings.

The City retained the services of SRF Consulting Group Inc. to conduct a Quiet Zone Assessment to identify the crossing improvements required for quiet zone implementation at nineteen rail crossings on the Ann Arbor (AA) Railroad's Mainline Subdivision and two rail crossings on the Great Lakes Central (GLC) Railroad's Ann Arbor Subdivision. This assessment included a field diagnostic review of the crossings with representatives from the City, the Michigan Department of Transportation (MDOT), the FRA, AA Railroad, and private crossing owners. This report provides a summary of the quiet zone assessment methodology, discussion items, and recommendations. The report also includes proposed crossing improvement scenarios with planning level layouts and construction cost estimates for each crossing, and a discussion of the potential for a phased quiet zone implementation.

Qualifying for Quiet Zone Implementation

The first requirement for cities seeking to implement a quiet zone is ensuring that each public crossing within the proposed quiet zone is equipped with the minimum requirements of entry gates and flashing lights with power-out indicators as well as constant warning time (CWT) detectors where reasonably practical. Only one crossing (Dhu Varren Road) is currently equipped with these warning devices. The remaining crossings would need to be upgraded at a cost of \$250,000 to \$400,000 per crossing.

Once the minimum warning device requirements are met, the FRA then evaluates potential quiet zones using a complex risk prediction and assessment calculation. The FRA's online Quiet Zone Calculator is used to calculate the risk index at each crossing. The risk calculations are based on factors such as train volumes and speed, highway traffic volumes, crossing geometry, and crash history. The FRA assumes that when the routine sounding of horns is eliminated, the risk at each crossing will increase. In order to qualify for quiet zone implementation, the City must install additional safety improvements such as non-traversable medians or four-quadrant gates to bring the risk levels in the corridor below the existing risk levels with the horn, or below a national average risk level established by the FRA.

Diagnostic Meeting and Railroad Coordination

As recommended by the Train Horn Rule, this assessment included an on-site diagnostic meeting with participation from key representatives from the City, MDOT, FRA, AA Railroad and private crossing owners. The diagnostic meeting was held on October 3rd, 2018. The diagnostic meeting minutes are provided in Appendix A. At each crossing, the diagnostic team evaluated the site conditions to evaluate safety issues and identify potential crossing improvements. Further coordination with the railroad has been conducted to provide estimated costs for warning device upgrades at each crossing.

One item discussed at the diagnostic meeting included the potential for crossing closures, which would reduce overall project costs and increase corridor safety, but would need to be weighed against the negative impacts to traffic circulation and property access. The team also discussed the potential for utility conflicts at multiple crossings. The development of detailed cost estimates for utility relocation are beyond the scope of this study and will need to be developed through further coordination between the railroad and the utility provider. However, each scenario included in this study includes a utility contingency to account for the uncertainty with this aspect of the quiet zone implementation.

Crossing Improvement Scenarios

Multiple crossing improvement scenarios are available which would allow for the implementation of one or more quiet zones in Ann Arbor. Various crossing improvement scenarios were developed by selecting individual crossing improvement options described in this report. The options were selected to achieve a specific goal for each scenario such as selecting options that result in the highest levels of safety or selecting only the most cost-effective scenarios while leaving others with only the minimum crossing signal upgrades. Documentation of the quiet zone risk calculations is included in Appendix B.

Each scenario below includes estimated costs for upgrading the railroad crossing signals, the estimated roadway costs associated with each improvement, a contingency for potential utility relocation or modification, and estimated annual maintenance costs based on guidance from MDOT's online railroad crossing annual maintenance estimates.

Figure i. Crossing Improvement Scenarios

Improvement Scenario	Signal Costs	Roadway Costs	Utility Contingency	TOTAL	Annual Maint. Costs
Scenario 1: Signal Upgrades Only	\$5,200,000	\$2,000	\$1,440,000	\$6,642,000	\$39,000
Scenario 2: Cost Effective	\$5,200,000	\$474,000	\$1,440,000	\$7,114,000	\$39,000
Scenario 3: Cost Effective with One Closure	\$4,950,000	\$474,000	\$1,360,000	\$6,784,000	\$37,000
Scenario 4: Cost Effective with Two Closures	\$4,650,000	\$442,500	\$1,280,000	\$6,372,500	\$35,000
Scenario 5: High Safety	\$5,400,000	\$1,047,700	\$1,440,000	\$7,887,700	\$39,000
Scenario 6: Phased, North	\$1,800,000	\$166,000	\$560,000	\$2,526,000	\$14,400
Scenario 7: Phased, South	\$3,400,000	\$308,000	\$880,000	\$4,588,000	\$24,600

Introduction

Study Purpose and Background

The City of Ann Arbor, Michigan (the City) is investigating options to improve safety and minimize the impacts of train horn noise at multiple at-grade highway-rail crossings throughout the community. The Federal Railroad Administration's (FRA's) Train Horn Rule, issued in June 2005, provides an opportunity to accomplish this objective. The Train Horn Rule specifies the procedures and actions necessary to establish a train horn quiet zone for at-grade highway-rail crossings.

The City retained the services of SRF Consulting Group Inc. to conduct a Quiet Zone Assessment to identify the crossing improvements required for quiet zone implementation at nineteen rail crossings on the Ann Arbor (AA) Railroad's Mainline Subdivision and two rail crossings on the Great Lakes Central (GLC) Railroad's Ann Arbor Subdivision. A map of the corridor with the locations of the proposed quiet zone crossings is shown in Figure 1.

This assessment included a field diagnostic review of the crossings with representatives from the City, the Michigan Department of Transportation (MDOT), the FRA, AA Railroad, and private crossing owners. This report provides a summary of the quiet zone assessment methodology, discussion items, and recommendations. The report also includes proposed crossing improvement scenarios with planning level layouts and construction cost estimates for each crossing, and a discussion of the potential for a phased quiet zone implementation.

Minimum Warning Device Requirements

At a minimum, each public crossing in a proposed quiet zone must be equipped with entry gates and flashing lights with power-out indicators as well as constant warning time (CWT) detectors where reasonably practical. Note that gates are equipped with one or more bells which sound as audible warning devices when the gates are being lowered even at quiet zone crossings. The crossing bell typically sounds at a range of 85-95 decibels, or roughly one-third of the sound level of the train horn.

Information on the characteristics of the Ann Arbor crossings is summarized in Table 1 on the following page. Only one crossing (Dhu Varren Road) is equipped with the minimum warning devices. The remaining 20 proposed quiet zone crossings are not equipped with the minimum warning devices and will need to be upgraded prior to quiet zone implementation. The locations of these crossings are also shown in Figure 1.

A summary of the discussion regarding the use of CWT detection at these crossings is included in the Diagnostic Meeting section of this report.

Table 1. Minimum Crossing Requirements

Crossing Name	Crossing ID	Average Daily Traffic (ADT)	ADT Year	Gates	Flashing Lights	CWT
AA Railroad Crossings						
S State Street	000209V	20,000	2010	No	Yes	Yes
Private Crossing	000211W			N/A		
E Hoover Avenue	000212D	5,603	2010	No	Yes	Yes
Hill Street	000213K	10,100	2010	No	Yes	Yes
E Madison Street	000214S	4,149	2010	No	Yes	No
S Main Street	000215Y	4,149	2015	No	Yes	No
Private Crossing	000216F			N/A		
W Jefferson Street	000218U	1,126	2010	No	Yes	No
Ashley Street	000219B	1,944	2010	No	Yes	No
William Street	000220V	4,577	2010	No	Yes	No
S First Street	000221C	3,600	2009	No	Yes	No
W Liberty Street	000223R	8,000	2010	No	Yes	No
W Summit Street	000228A	4,600	2016	No	Yes	Yes
Wright Street	000231H	150	2010	No	No	Yes
Longshore Drive	000232P	624	2010	No	No	Yes
Pontiac Trail	000233W	7,852	2017	No	Yes	Yes
Bowen Street	000234D	148	2010	No	No	No
Traver Road	000235K	463	2016	No	Yes	Yes
Barton Drive	000236S	2,250	2010	No	Yes	Yes
GLC Railroad Crossings						
Traver Road	000239M	460	2010	No	No	No
Dhu Varren Road	000240G	2,487	2007	Yes	Yes	Yes

Note that the FRA requires that traffic volumes be no more than 1-2 years old for the purposes of quiet zone risk calculations. The traffic included above are sufficient for the purposes of preliminary risk calculations, but will need to be updated prior to submitting quiet zone documentation to the FRA.

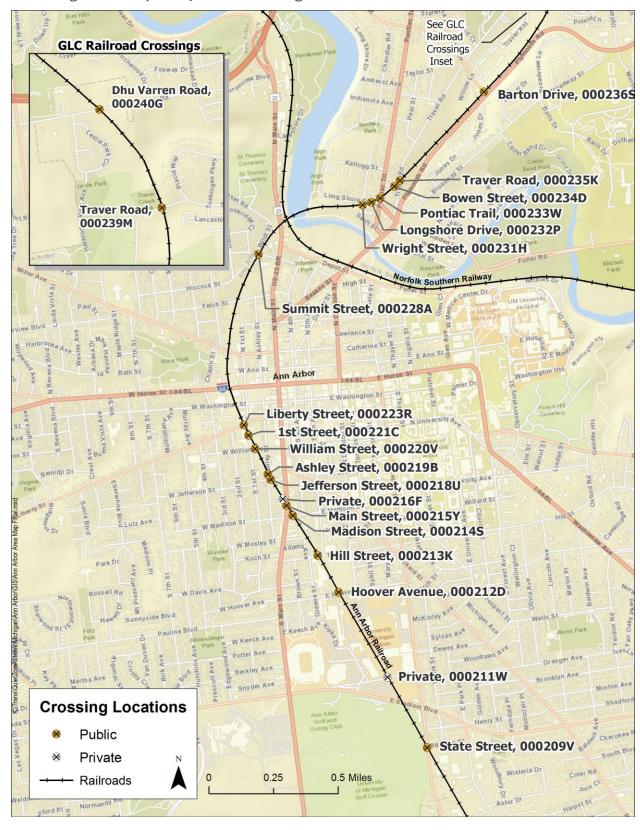


Figure 1. Proposed Quiet Zone Crossing Locations

Quiet Zone Risk Calculations

The FRA evaluates potential quiet zones using a complex risk prediction and assessment calculation. The FRA's online Quiet Zone Calculator is used to calculate the risk index at each crossing. The risk calculations are based on factors such as train volumes and speed, highway traffic volumes, crossing geometry, and crash history. The FRA determines the viability of quiet zone implementation by comparing three risk index values:

- **QZRI** The Quiet Zone Risk Index is the average of the risk index values for each crossing in a proposed quiet zone assuming train horns are not routinely sounded. The current QZRI value of the proposed quiet zone crossings is **5,631** prior to the implementation of additional safety improvements.
- **RIWH** The Risk Index With Horns is the average of the risk index values for each crossing in a proposed quiet zone assuming no additional safety improvements and the routine sounding of horns. The RIWH typically represents the existing risk levels. The current RIWH value of the proposed quiet zone crossings is **3,376**.
- **NSRT** The Nationwide Significant Risk Threshold is the average risk level of all highway-rail crossings in the United States that are equipped with flashing lights and gates and at which locomotive horns are routinely sounded. The NSRT is recalculated annually to reflect existing risk trends. The current value of the NSRT is **14,723**.

The QZRI for a proposed quiet zone is reduced through the implementation of FRA-approved Supplementary Safety Measures (SSMs) and/or Alternative Safety Measures (ASMs). A quiet zone may be implemented when SSMs and/or ASMs have been installed sufficient to bring the QZRI below either the RIWH or the NSRT. It is important to note that the QZRI and RIWH are measured as an average of the corridor as a whole rather than for individual crossings.

An illustration of the risk calculations and comparisons is shown in Figure 2. This figure shows the individual risk levels (vertical bars) and corridor average risk levels (horizontal lines) for a hypothetical three-crossing quiet zone. The blue bars and lines represent the existing risk levels assuming the horn is still sounded and no additional crossing improvements have been implemented. The red bars and lines represent the risk levels assuming the routine horn sounding is eliminated, but no additional crossing improvements have been implemented. The green bars and lines represent the risk levels after improvements have been made to 3rd Street and 5th Street. The 12th Street crossing is not improved and the risk levels for that crossing remain higher than the existing risk levels. However, the average risk in the corridor is decreased below both the RIWH and NSRT thresholds, qualifying for quiet zone implementation.

Note that in the example below, the NSRT threshold is lower than the RIWH threshold. In the proposed Ann Arbor quiet zone, the NSRT threshold is higher than the RIWH threshold, and is therefore easier to achieve.

Risk level with no horn and no improvements (Baseline)

Current risk level (RIWH)

Risk level with no horn and proposed improvements (QZRI)

Baseline Risk

Figure 2. Example Risk Calculations

Reducing Risk Below National Average

3rd Street

If the QZRI is reduced below the NSRT alone, the quiet zone may be implemented, but the FRA will conduct an annual risk review to ensure that the quiet zone improvements still comply with the Train Horn Rule and that the QZRI is still below the NSRT. If an annual review finds that the quiet zone no longer qualifies, the public authority is given three years to install additional improvements to bring the quiet zone back into compliance. While the City has the option to implement a quiet zone by meeting the NSRT threshold, SRF encourages the City to consider alternative scenarios that will meet the RIWH threshold, avoiding the annual risk review process while also making the corridor safer than the current conditions.

5th Street

12th Street

Reducing Risk Below Existing Levels

If the QZRI is reduced below the RIWH using SSMs at every crossing, the quiet zone may be implemented and the City must provide an update to the FRA every five years stating that the safety measures implemented to achieve the quiet zone are still in place as proposed. If the QZRI is reduced below the RIWH without the use of SSMs at every crossing, this update to the FRA must be provided every three years. Costs associated with these updates include staff time needed to prepare the confirmation letter and the cost of collecting updated traffic volumes at each crossing if not available from other sources.

Types of Crossing Improvements

The FRA has pre-approved a variety of Supplementary Safety Measures (SSMs) to be used to improve safety at each crossing. These options and their corresponding risk reduction values are as follows:

- Closure or Grade Separation (100 percent risk reduction)
- Four-Quadrant Gates (77-82 percent risk reduction)
- Channelization Devices (e.g. Tuff Curb, Qwick Kurb) (75 percent risk reduction)
- Non-Traversable Medians (80 percent risk reduction)
- One-Way Street (82 percent risk reduction)

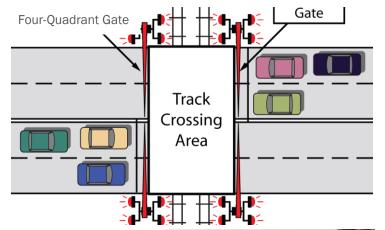
Examples of these improvements are shown on the following page. Of these improvements, four quadrant gates and non-traversable medians are the most commonly used. Channelization devices are also frequently used in place of non-traversable medians where cost, narrow roadway width, or other roadway conditions must be considered. However, the channelization devices (also referred to as channelized delineators) can be damaged by vehicles or during snow removal operations, necessitating ongoing monitoring and maintenance. Due to these factors, non-traversable medians were determined to be the most desirable crossing improvement option at most of the crossings in the corridor.

Non-traversable medians must meet minimum length requirements in order to be used for full risk reduction credit. The FRA mandates that medians and delineators must extend a minimum of 100 feet from the crossing gate arm. However, a 60-foot median is also acceptable if a longer median would interfere with either a public roadway or a commercial driveway. Medians that are shorter than these standards may still be used but are considered Alternative Safety Measures (ASMs) and require the submittal of a Quiet Zone Application to the FRA. Risk reduction for reduced length medians is applied on a prorated basis. For example, if the proximity of intersections limits both median lengths to 30 feet instead of the minimum 60 feet, the median will be considered half as effective (40 percent reduction rather than 80 percent).

In some cases, crossing improvements may be difficult or impossible due to the configuration of roadways, accesses, and other factors. However, the Train Horn Rule does not require improvements at every crossing in a quiet zone.

Wayside Horns

In place of SSM or ASM improvements, the City may also implement wayside horns at one or more crossings. Wayside horns are stationary horn systems located at a highway rail grade crossing. These systems must meet the same decibel level requirements of standard train horns, but their stationary location creates a smaller area of noise impact. Crossings with wayside horns must also be equipped with the minimum warning device requirements of gates and flashing lights with power out indicators and CWT detection. In our experience, wayside horns are rarely used as they still require upgrade crossing warning devices and only reduce the horn sound rather than eliminate it.











Diagnostic Meeting

As recommended by the Train Horn Rule, this assessment included an on-site diagnostic meeting with participation from key representatives from the City, MDOT, FRA, AA Railroad and private crossing owners. The diagnostic meeting was held on October 3rd, 2018. The diagnostic meeting minutes are provided in Appendix A. At each crossing, the diagnostic team evaluated the site conditions to evaluate safety issues and identify potential crossing improvements. A summary of the improvement options is included in the following section.

Many factors and issues related to the FRA Train Horn Rule and quiet zone implementation were discussed during the meeting and are included in the meeting minutes. The following section summarizes some of the key discussion items.

Crossing Closures

Roadway closures were discussed as potential improvement options at several crossings with lower traffic volumes. Roadway closures can be difficult to implement due to the significant impact on traffic circulation and property access. However, closures effectively eliminate the risk at a crossing and are therefore an effective improvement option. Incentive funding for crossing closures may be available from MDOT. The amount of funding is dependent on the traffic volumes as well as the number of closures that are pursued. The crossing improvement recommendations in this study include scenarios with and without the use of closures.

Potential Utility Conflicts

Multiple crossing locations have the potential for conflicts between utility lines and gate arms. In some cases, this may be addressed through gate mast placement. Other cases may require utility relocation or raising. Unfortunately, it is not possible to identify all conflict points without conducting additional survey work outside the scope of this study. For the purpose of cost estimation, a contingency of \$80,000 was added to every crossing requirement warning device upgrades. Based on the information available, this should be a considered a conservative estimate. Some crossings with potential conflicts may not require utility relocation or modification, or the modification may not require the full cost at each crossing.

Constant Warning Time Waiver

Constant Warning Time (CWT) is a type of train detection required—where reasonably practical—by the FRA for all new QZ implementations. Simple train detection systems (e.g., motion sensors, track circuits) are designed to activate the crossing warning devices when they are triggered by a train a minimum of 20 seconds before the train enters the crossing. In cases where a train is approaching the crossing more slowly than usual, this warning time at the crossing may increase significantly. Motorists at the crossing may interpret the longer waiting time as a sign that the warning devices are malfunctioning and attempt to circumvent the gates. CWT addresses this issue by measuring the speed of the approaching train and adjusting the timing of the warning device activation to maintain a consistent warning time for every warning device activation.

During the diagnostic meeting, AA Railroad representatives noted that some crossings in the corridor may have issues with CWT installation due to the tendency for water to pool on or near the tracks. This is particularly an issue during winter months when the track ballast becomes saturated with roadway runoff and road salt. These conditions may cause a short in the track circuit, falsely activating the warning devices.

The Train Horn Rule notes that CWT is required "where reasonably practical." In some cases, the FRA can waive the requirement for CWT at specific crossings. The potential for CWT waivers in the corridor was discussed at the diagnostic meeting. Such waivers are typically allowed only for siding or yard tracks where operational conditions would prevent a CWT system from operating as intended. The FRA has historically required CWT to be installed at all mainline tracks in a quiet zone except under unusual circumstances. The City has the option of submitting a CWT waiver request for one or more crossings in the quiet zone, but there is no guarantee that this would be granted by the FRA. Note that the waiver request must be submitted jointly with the railroad.

Crossing Improvement Options

At each crossing, the diagnostic team evaluated the site conditions to evaluate safety issues and identify potential crossing improvements. A summary of the recommended improvement options is included below. High-level aerial layouts of the improvements and construction cost estimates are also included on the following pages. The preliminary estimates were developed for each improvement option based on SRF's previous experience with quiet zone implementation as well as input from AA Railroad regarding warning device upgrade costs. The following improvement options were considered at each crossing:

- Minimum Warning Device Upgrades: At a minimum, each crossing must be upgraded to include gates, flashing lights, power-out indicators, and CWT detection. The cost estimates for these improvements range between \$250,000 and \$400,000 per crossing depending on the number of gates and cantilever-mounted flashing light systems required. Note that pedestrian gates are not required by the FRA for quiet zones and are not included in the estimated costs for warning device upgrades. Pedestrian gates typically cost an additional \$50,000 per pair. Pedestrian warning is achieved through signage, flashing lights, and warning bells that sound when the gates are lowered regardless of quiet zone status.
- Four-Quadrant Gates: This improvement option has the advantage of causing minimal impact to access to adjacent properties but is typically more expensive than other available options. AA Railroad does not currently have any four-quadrant gates on their system and their preference is to avoid their use when possible since they require more maintenance compared to simple two-quadrant gate systems. Based on information provided by AA Railroad, the estimated cost of a four-quadrant gate system is \$500,000. Four-quadrant gates are proposed only at the Summit Street crossing, where other improvement options are not feasible.
- Non-Traversable Medians: These improvements prevent motorists from circumventing lowered gate arms. The Train Horn Rule dictates that medians must be at least six inches high and should be at least 100 feet long as measured from the gate arm to the last full-height section of the median. Medians can be as short as 60 feet and still qualify as SSMs if public roadways or commercial accesses prevent longer medians. Medians shorter than 60 feet are classified as ASMs and require the submittal of a Quiet Zone Application to the FRA. Commercial accesses should be closed or relocated if they are within the extents of the median. Private accesses may remain within the extents of the median, but would be limited to right-in/right-out (RIRO) access. Standard medians two to four feet wide are estimated at approximately \$350 per linear foot. Access closures or relocations are estimated at approximately \$20,000 to \$30,000 per access depending on the extents of modification.

- Channelization Devices/Channelized Delineators: These improvement options function similarly to non-traversable medians and are subject to the same length requirements. Their narrow width makes them suitable for locations where narrow roadway width would prevent the use of medians, but additional maintenance and upkeep are required as they are more susceptible to damage. Costs for these improvements are estimated at \$150 per linear foot.
- Wayside Horns: These horn systems do not technically qualify as an SSM or ASM improvement, but they may be used as a substitute for train horns. For risk calculation purposes, crossings with wayside horns are removed from the calculations. Wayside horns are not typically recommended as they do not fully eliminate the train horn sound and also still require the installation of crossing warning devices. They are estimated at \$100,000 per crossing in addition to the minimum signal upgrade costs.
- Closure: Closure of a crossing will reduce risk by 100 percent but will have a significant impact on traffic circulation and access. An additional benefit is the cost savings of avoiding the minimum signal upgrade requirements. Incentive payments from MDOT are available and are valued at approximately \$100,000 per crossing. For the purposes of this study, closures are considered a cost neutral option. Roadway reconstruction and fencing is typically required to fully close the crossing to both vehicular and pedestrian access.
- No Additional Improvements: The Train Horn Rule does not require that additional improvements be installed at every crossing, so long as each is equipped with the minimum signal requirements. For each crossing, the option to install only the minimal signal upgrade requirements is available to the City. However, SRF recommends that the City consider additional crossing improvements where possible.
- Ongoing Maintenance Costs: Under state law, the cost of maintenance for rail crossing signals is split evenly between the railroad and the municipality. The cost depends on factors such as the need for cantilevers and the number of tracks at each crossing. More information can be found on the rail section of the MDOT website. For this study annual costs were assumed as \$2,000 for crossings without cantilevers and \$2,400 for crossing with cantilevers. While not specified, the annual maintenance costs for four-quadrant gates are assumed to be higher than standard crossings. Annual maintenance costs for four-quadrants gates were assumed to be \$3,000.

The following pages include a summary of the potential improvement option sat each crossing, including a layout of the proposed improvement, preliminary cost estimates, and additional notes regarding any potential issues or concerns.

-

¹ https://www.michigan.gov/mdot/0,4616,7-151-22444_56486-343808--,00.html

S State Street (000209V)

Option 1: SSM Medians

In 100' Median

Upgrade Warning Devices
Pedestrian Sign

79' Median

100' Median

Risk Reduction: $11,725 \rightarrow 2,345 (80\%)$ Signal Costs: \$400,000 Roadway Costs: \$98,000 Total Cost: \$498,000 (+\$2,400 Ann. Maint.)

Notes: Signal improvement costs are higher at this crossing due to the additional gate and cantilever needed for the westbound approach on Stimson Street. This crossing has the highest baseline risk level in the corridor.

Option 2: No Treatment

Upgrade Warning Devices

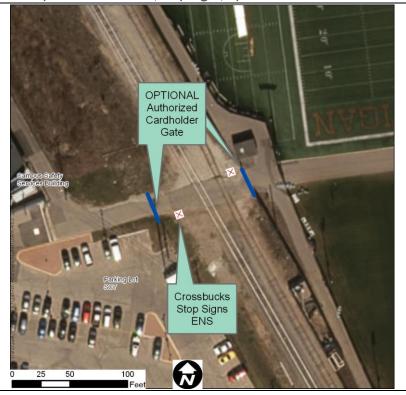
O 25 50 100
Feet

Risk Reduction: $11,725 \rightarrow 11,725 (0\%)$ Signal Costs: \$400,000 Roadway Costs: \$0 Total Cost: \$400,000 (+\$2,400 Ann. Maint.)

Notes: No treatment is a potential option at this crossing, but is not recommended due to the high risk levels at the crossing and the relative ease of improvement implementation.

Private Crossing (000211W)

Option 1: Crossbucks, Stop Signs, Optional Cardholder Gate

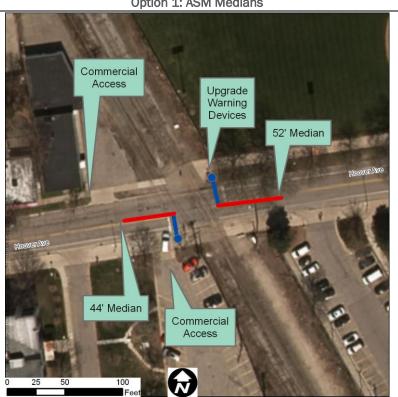


Risk Reduction:	n/a
Signal Costs:	n/a
Roadway Costs:	\$500
Total Cost:	\$500

Notes: The installation of crossbucks and stop signs is required at this crossing. A gate, accessible only to authorized personnel, was discussed as a potential option at this crossing, but is not required for quiet zone implementation. The cost of the optional gate is not included above.

E Hoover Avenue (000212D)

Option 1: ASM Medians



6,670 → 2,668 (60%) Risk Reduction: \$300,000 Signal Costs: Roadway Costs: \$31,500 **Total Cost:** \$331,500 (+\$2,400 Ann. Maint.)

Notes: ASM medians are the recommended option at this crossing due to the conflicting accesses on both approaches.

Option 2: No Treatment

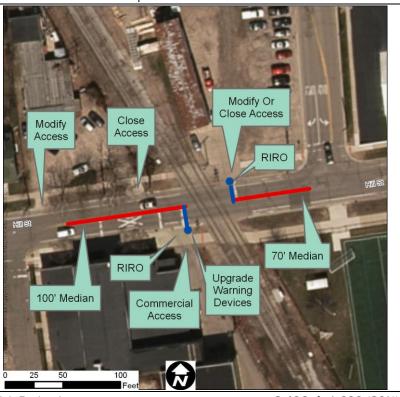


6,670 → 6,670 (0%) Risk Reduction: Signal Costs: \$300,000 Roadway Costs: \$0 Total Cost: \$300,00 (+\$2,400 Ann. Maint.)

Notes: No treatment is a potential option for this crossing. This option would still require the installation of minimum warning device requirements for this crossing.

Hill Street (000209V)

Option 1: SSM Medians



Risk Reduction: 8,496 → 1,699 (80%)
Signal Costs: \$250,000
Roadway Costs: \$99,500

Total Cost: \$311,000

(+\$2,000 Ann. Maint.)

Notes: SSM medians are a potential option at this crossing if the commercial accesses in the northwest quadrant are reconfigured to a single access west of the median. Closure of the commercial access in the northeast quadrant is also recommended, but not required for quiet zone implementation.

Option 2: No Treatment



Risk Reduction: $8,496 \rightarrow 8,496 (0\%)$ Signal Costs: \$250,000 Roadway Costs: \$0 Total Cost: \$250,000 (+\$2,000 Ann. Maint.)

Notes: No treatment is a potential option for this crossing. This option would still require the installation of minimum warning device requirements for this crossing.

E Madison Street (000209V)

Option 1: No Treatment

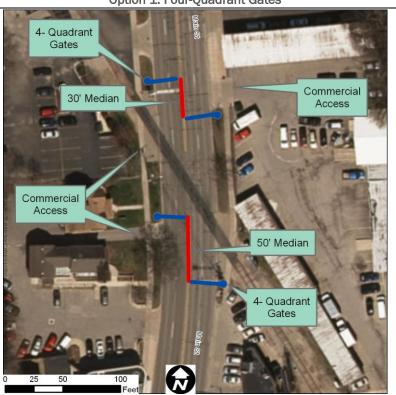


Risk Reduction: $5,896 \rightarrow 5,896 (0\%)$ Signal Costs: \$300,000 Roadway Costs: \$0 Total Cost: \$300,000 (+\$2,400 Ann. Maint.)

Notes: Due to multiple access conflicts, the installation of crossing improvements is very difficult. The diagnostic team recommended no treatment as the preferred option at this crossing. This option would still require the installation of minimum warning device requirements for this crossing.

S Main Street (000209V)

Option 1: Four-Quadrant Gates



 Risk Reduction:
 5,896 → 1,356 (77%)

 Signal Costs:
 \$500,000

 Roadway Costs:
 \$28,000

 Total Cost:
 \$528,000

(+\$2,400 Ann. Maint.)

Option 2: No Treatment



 Risk Reduction:
 5,896 →5 (50%)

 Signal Costs:
 \$300,000

 Roadway Costs:
 \$0

 Total Cost:
 \$300,000

 (+\$2,400 Ann. Maint.)

Notes: Four-quadrant gates may be the most feasible option at this crossing due to the proximity of multiple commercial accesses. However, due to the proximity of these accesses, the angle of the track as it crosses the roadway, and the feasible placement of the gate arms, ASM medians are recommended to close the gaps between the entry and exit gates.

Notes: No treatment is a potential option for this crossing. This option would still require the installation of minimum warning device requirements for this crossing.

Private Crossing (000216F)

Option 1: Crossbucks and Stop Signs



Risk Reduction:	n/a
Signal Costs:	n/a
Roadway Costs:	\$500
Total Cost:	\$500

Notes: The installation of crossbucks and stop signs is required at this crossing. The precise placement of the signs on the westbound approach will need to be coordinated between FRA, MDOT, and the property owner to ensure access to the parking lot while ensuring compliance with sign placement standards.

W Jefferson Street (000218U)

Option 1: No Treatment



desires on St.

Close Crossing

0 25 50 100
Feet

Option 2: Closure

 Risk Reduction:
 3,452 → 3,452 (0%)

 Signal Costs:
 \$300,000

 Roadway Costs:
 \$0

 Total Cost:
 \$300,000

 (+\$2,000 Ann. Maint.)

Upgrade Warning Devices

Risk Reduction: $3,452 \rightarrow 0 (100\%)$ Signal Costs:\$0Roadway Costs:\$0Total Cost:\$0

Notes: No treatment is a potential option for this crossing. This option would still require the installation of minimum warning device requirements for this crossing.

Notes: Closure of the crossing is assumed to be cost neutral due to MDOT's incentive funding program. Closure of the crossing would impact traffic circulation as well as access to adjacent properties.

Ashley Street (000219B)

Option 1: ASM Medians



 $3,598 \rightarrow 1,799 (50\%)$

\$250,000 \$50,250

\$300,250

(+\$2,000 Ann. Maint.)

Option 2: No Treatment



 $3,598 \rightarrow 3,598 (0\%)$ Risk Reduction: Signal Costs: \$250,000 \$0 Roadway Costs: **Total Cost:** \$250,000

Notes: No treatment is a potential option for this crossing. This option would still require the installation of minimum warning device

requirements as well as the additional access gate for this crossing.

Notes: ASM medians are the recommended option at this crossing due to the proximity of Jefferson Street to the south. An additional gate will likely be required to restrict traffic from the residential access to the northeast (Ashley Mews Drive) since the access would be located between the southbound gate and the crossing.

Signal Costs:

Total Cost:

Roadway Costs:

(+\$2,000 Ann. Maint.)

Ashley Street (000219B)

Option 3: Closure



Risk Reduction:	3,598 → 0 (0%)
Signal Costs:	\$0
Roadway Costs:	\$0
Total Cost:	\$ 0

Notes: Closure of the crossing is assumed to be cost neutral due to MDOT's incentive funding program. Closure of the crossing would impact traffic circulation as well as access to adjacent properties.

William Street (000220V)

Option 1: ASM Medians



Risk Reduction: 8,845 **→** 4,128 (53%) \$250,000 Signal Costs: Roadway Costs: \$42,000 \$292,000 **Total Cost:**

(+\$2,000 Ann. Maint.)

Notes: ASM medians are the recommended option at this crossing due to the proximity of commercial accesses and First Street to the west. The City noted during the diagnostic that this street will be converted to a two-lane street with bicycle lanes.

Option 2: No Treatment

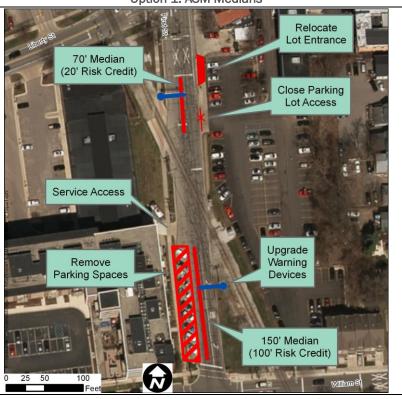


8,845 → 8,845 (0%) Risk Reduction: Signal Costs: \$250,000 Roadway Costs: \$0 **Total Cost:** \$250,000 (+\$2,000 Ann. Maint.)

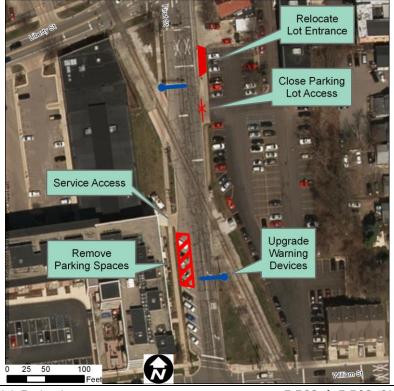
Notes: No treatment is a potential option for this crossing. This option would still require the installation of minimum warning device requirements for this crossing.

S First Street (000221C)

Option 1: ASM Medians



Option 2: No Treatment



Risk Reduction: Signal Costs: Roadway Costs: Total Cost: 5,563 → 2,596 (53%) \$250,000 \$95,450 \$345,450

(+\$2,000 Ann. Maint.)

 Risk Reduction:
 5,563 → 5,563 (0%)

 Signal Costs:
 \$250,000

 Roadway Costs:
 \$31,750

 Total Cost:
 \$281,750

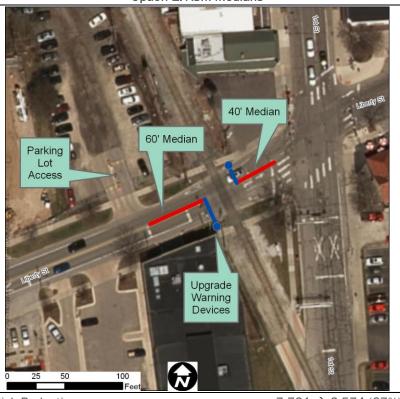
 (+\$2,000 Ann. Maint.)

Notes: Note that this roadway will be converted from one-way to two-way operation. ASM medians are the recommended option at this crossing due to the conflicting accesses to the north. Relocation of the parking lot access in the northeast quadrant will be required so the access is not between the gate and the crossing. Existing street parking adjacent to the proposed median must be removed per FRA direction.

Notes: No treatment is a potential option for this crossing. This option would still require the installation of minimum warning device requirements for this crossing. Relocation of the parking lot access in the northeast quadrant will be required as in Option 1. Existing street parking between the proposed northbound gate arm and the crossing must be removed per FRA direction.

W Liberty Street (000223R)

Option 1: ASM Medians



 $7,721 \rightarrow 2,574 (67\%)$ Risk Reduction: \$250,000 Signal Costs: Roadway Costs: \$35,000 \$285,000 **Total Cost:**

(+\$2,000 Ann. Maint.)

Notes: This option proposes ASM medians for the crossing. Longer medians are not possible along the both approaches due to parking lot access to the west, and the proximity of First St, to the east.

Option 2: No Treatment



Risk Reduction: Signal Costs: Roadway Costs: **Total Cost:** (+\$2,000 Ann. Maint.)

Notes: No treatment is a potential option for this crossing. This option would still require the installation of minimum warning device requirements for this crossing.

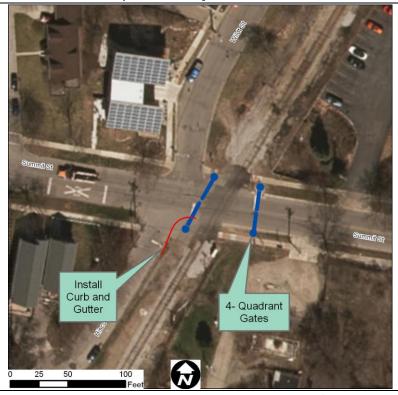
\$250,000

\$250,000

\$0

W Summit Street (000228A)

Option 1: Four-Quadrant Gates



Risk Reduction: $5,005 \rightarrow 1,151 (77\%)$ Signal Costs: \$500,000 Roadway Costs: \$2,000 Total Cost: \$502,000 (+\$3,000 Ann. Maint.)

Notes: Four-quadrant gates are proposed for this crossing. Due to the multiple intersections adjacent to the crossing, standard two-quadrant gates may not be effective. Curb and gutter would need to be installed (shown in red) to protect the gate arm at the corner of Hiscock and Summit Streets.

Wright Street (000231H)

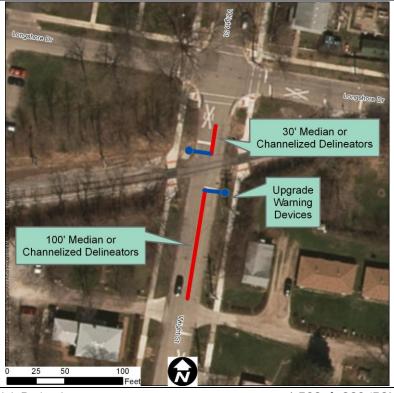
Option 1: Closure



 $1.509 \rightarrow 0 (0\%)$ Risk Reduction: Signal Costs: \$0 Roadway Costs: \$0 **Total Cost:** \$0

Notes: Closure of the crossing is assumed to be cost neutral due to MDOT's incentive funding program. Closure of the crossing would impact traffic circulation as well as access to adjacent properties.

Option 2: ASM Channelized Delineators



1,509 → 660 (56%) Risk Reduction: Signal Costs: \$250,000 Roadway Costs: \$19,500 **Total Cost:** \$269,500 (+\$2,000 Ann. Maint.)

Notes: This option proposes ASM channelized delineators for the crossing. Delineators, instead of medians, are recommended due to the narrow width of the roadway. Longer delineators are not possible along the northern approach due to the proximity of Longshore Drive.

Option 3: No Treatment



 Risk Reduction:
 1,509 → 1,509 (0%)

 Signal Costs:
 \$250,000

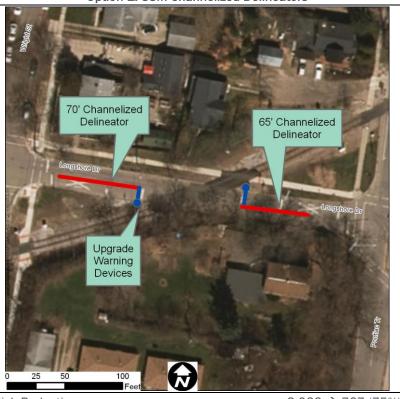
 Roadway Costs:
 \$0

 Total Cost:
 \$250,000

 (+\$2,000 Ann. Maint.)

Longshore Drive (000232P)

Option 1: SSM Channelized Delineators



Risk Reduction: 3,066 → 767 (75%)
Signal Costs: \$250,000
Roadway Costs: \$20,250

Total Cost: \$270,250

(+\$2,000 Ann. Maint.)

Notes: This option proposes full-length, SSM channelized delineators for the crossing. Delineators, instead of medians, are recommended due to the narrow width of the roadway.

Option 2: No Treatment



Risk Reduction: $3,066 \rightarrow 3,066 (0\%)$ Signal Costs: \$250,000 Roadway Costs: \$0 Total Cost: \$250,000 (+\$2,000 Ann. Maint.)

Pontiac Trail (000233W)

Option 1: SSM Medians

RIRO

Gate Skewed
To Account For Driveway

Option 1: SSM Median

Upgrade Warning Devices

Option 2: No Treatment



Risk Reduction: Signal Costs: Roadway Costs: Total Cost: 5,095 → 1,019 (80%) \$250,000 \$56,000 \$306,000

(+\$2,000 Ann. Maint.)

 Risk Reduction:
 5,095 → 5,095 (0%)

 Signal Costs:
 \$250,000

 Roadway Costs:
 \$0

 Total Cost:
 \$250,000

 (+\$2,000 Ann. Maint.)

Notes: This option proposes full-length, SSM medians for the crossing. The southbound gate will need to be installed at a skew due to the proximity of the residential driveway on the west side of the roadway.

Bowen Street (000234D)

Option 1: Closure



 $1,244 \rightarrow 0 (100\%)$ Risk Reduction: Signal Costs: \$0 Roadway Costs: \$0 **Total Cost:** \$30

Notes: Closure of the crossing is assumed to be cost neutral due to MDOT's incentive funding program. Closure of the crossing would impact traffic circulation as well as access to adjacent properties.

Option 2: ASM Channelized Delineators



1,244 →459 (63%) Risk Reduction: Signal Costs: \$250,000 \$20,250 Roadway Costs: \$270,250 **Total Cost:** (+\$2,000 Ann. Maint.)

Notes: This option proposes ASM channelized delineators for the crossing. Delineators, instead of medians, are recommended due to the narrow width of the roadway. Longer delineators are not possible along the eastern approach due to the proximity of Traver Road.

Option 3: No Treatment



 Risk Reduction:
 1,244 → 1,244 (0%)

 Signal Costs:
 \$250,000

 Roadway Costs:
 \$0

 Total Cost:
 \$250,000

 (+\$2,000 Ann. Maint.)

Traver Road (000235K)

Option 1: SSM Medians

RIRO

Gate Skewed
To Account For
Driveway

RIRO

RIRO

RIRO

100' Median

100' Median

Option 2: No Treatment



Risk Reduction: Signal Costs: Roadway Costs: Total Cost: 3,157 → 631 (80%) \$250,000 \$70,000 \$320,000

\$320,000 Total Cost: (+\$2,000 Ann. Maint.)

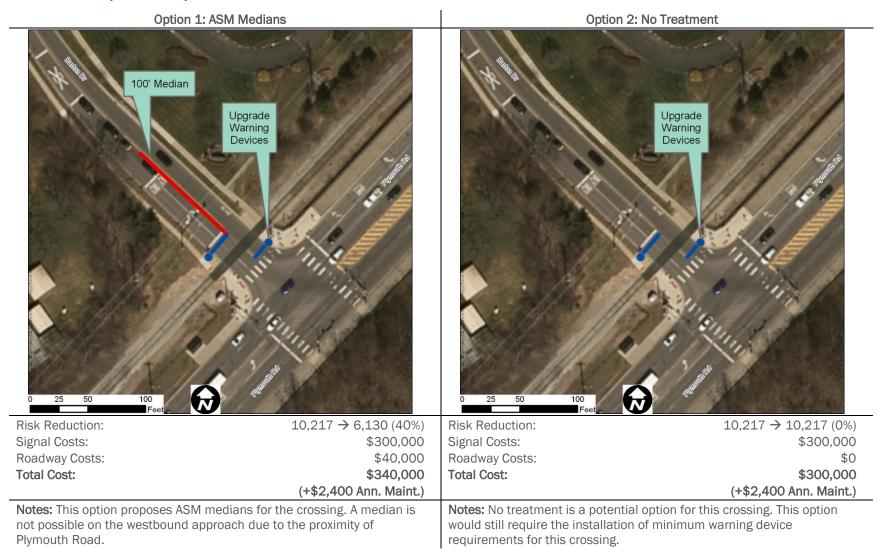
Signal Costs:

Roadway Costs:

3,157 → 3,157 (0%) \$250,000 \$0 \$250,000 (+\$2,000 Ann. Maint.)

Notes: This option proposes full-length, SSM medians for the crossing. The northbound gate will need to be installed at a skew due to the proximity of the residential driveway on the east side of the roadway.

Barton Drive (000236S)



Traver Road (000239M)

Option 1: Closure Close Crossing 100

Option 2: SSM Medians



Risk Reduction: 1,319 \rightarrow 0 (100%) Signal Costs: \$0 Roadway Costs: \$0 **Total Cost:** \$0

Risk Reduction: $1,319 \rightarrow 264 (80\%)$ Signal Costs: \$250,000 Roadway Costs: \$270,000 Total Cost: \$520,000 (+\$2,000 Ann. Maint.)

Notes: Closure of the crossing is assumed to be cost neutral due to MDOT's incentive funding program. Closure of the crossing would impact traffic circulation as well as access to adjacent properties.

Notes: This option proposes full-length, SSM medians for the crossing. Currently a gravel road, both approaches would need to be widened and paved to allow for median installation.

Option 3: No Treatment



Risk Reduction: 1,319 \rightarrow 1,319 (0%) Signal Costs: \$250,000 Roadway Costs: \$0 Total Cost: \$250,000 (+\$2,000 Ann. Maint.)

Dhu Varren Road (000240G)

Option 1: SSM Medians

100' Median

Existing Warning Devices Meet Requirements

0 25 50 100 Feet

Option 2: No Treatment



Risk Reduction: 8,510 \rightarrow 1,702 (80%) Signal Costs: n/a Roadway Costs: \$70,000 Total Cost: \$70,000

Notes: This option proposes full-length, SSM medians for the crossing. It was confirmed during the diagnostic meeting that the existing warning devices meet Train Horn Rule specifications.

Risk Reduction: $8,510 \rightarrow 8,510 (0\%)$ Signal Costs: n/aRoadway Costs: \$0Total Cost: \$0

Notes: No treatment is a potential option for this crossing. However, improvements are recommended given the higher than average risk levels at this crossing.

Crossing Improvement Scenarios

Multiple crossing improvement scenarios are available which would allow for the implementation of one or more quiet zones in Ann Arbor. Each scenario below was developed by selecting the various individual crossing improvement options described in the previous section. The options were selected to achieve a specific goal for each scenario such as selecting options that result in the highest levels of safety or selecting only the most cost-effective scenarios while leaving others with only the minimum crossing signal upgrades. Documentation of the quiet zone risk calculations is included in Appendix B.

Each scenario presented below also includes estimated annual maintenance costs based on guidance from MDOT's online railroad crossing annual maintenance estimates.

NSRT Threshold

As noted earlier, a quiet zone may be implemented if the Final Quiet Zone Risk Index (QZRI) is below either the Nationwide Significant Risk Threshold (NSRT) or the Risk Index With Horns (RIWH) threshold. The first scenario presented below assumes only the improvements necessary to qualify under the NSRT threshold are implemented. While this would qualify for implementation, the quiet zone would be subject to an annual risk reassessment completed by the FRA. If the annual review finds that the risk levels no longer qualify due to additional crashes or higher roadway or train traffic volumes, the City would be required to install additional safety improvements within three years of the finding.

Scenario 1: Signal Upgrades Only

As shown in the table below, this scenario assumes only the minimum warning device requirements are installed at each crossing, with the exception of Summit Avenue where four-quadrant gates have been installed. It was determined by the diagnostic team that two-quadrant gates would not provide sufficient protection at the crossing due to multiple intersections in close proximity to the crossing. This scenario results in a QZRI of 5,428, less than the NSRT value of 14,723. The cost of implementation, including roadway improvements, warning device upgrades, and a utility contingency is \$6,642,000.

Crossing	1: Signal Upgrade Street	Baseline QZRI	RIWH	Eff. of New ASM	Final QZRI	Option	Improvement Summary	Aı	nn. Maint Costs	l	Signal Costs	ı	Roadway Costs
000240G	Dhu Varren Road	8,510	5,102	-	8,510	0	Signals Only	\$	-	\$	-	\$	-
000239M	Traver Road	1,319	791	-	1,319	0	,	_	2,000.00	\$	250,000	\$	-
000236S	Barton Drive	10,217	6,125	-	10,217	0	Signals Only	\$	2,400.00	\$	300,000	\$	-
000235K	Traver Road	3,157	1,893	-	3,157	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000234D	Bowen Street	1,244	746	-	1,244	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000233W	Pontiac Trail	5,095	3,054	-	5,095	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000232P	Longshore Drive	3,066	1,838	-	3,066	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000231H	Wright Street	1,509	905	-	1,509	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000228A	W Summit Street	5,005	3,000	0.77	1,151	1	Four Quad Gate	\$	3,000.00	\$	500,000	\$	2,000
000223R	W Liberty Street	7,721	4,629	-	7,721	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000221C	S First Street	5,563	3,335	-	5,563	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000220V	William Street	8,845	5,303	-	8,845	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000219B	Ashley Street	3,598	2,157	-	3,598	0	Signals Only	\$	2,000.00	\$	300,000	\$	-
000218U	W Jefferson Street	3,452	2,069	-	3,452	0	Signals Only	\$	2,000.00	\$	300,000	\$	-
000215Y	S Main Street	5,896	3,535	-	5,896	0	Signals Only	\$	2,400.00	\$	300,000	\$	-
000214S	E Madison Street	5,896	3,535	-	5,896	0	Signals Only	\$	2,400.00	\$	300,000	\$	-
000213K	Hill Street	8,496	5,094	-	8,496	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000212D	E Hoover Avenue	6,670	3,999	-	6,670	0	Signals Only	\$	2,400.00	\$	300,000	\$	-
000209V	S State Street	11,725	7,029	-	11,725	0	Signals Only	\$	2,400.00	\$	400,000	\$	-
	Average	5,631	3,376		5,428		Total	\$	39,000	\$5	,200,000	\$	2,000
				NSRT	14,723			Por	adway and	Cian	val	Ś	5,202,000
				RIWH	3,376				lity Conting	_		ç	1,440,000
				QZRI	5,428	1 (1	(QZRI / RIWH)	TO		sen	Ly	÷	6,642,000

To measure the potential risk of the QZRI rising above the NSRT, the following sensitivity analyses were completed:

- One of the primary drivers of the FRA risk calculations is the number of crashes in the past five years at each crossing. As of the date of this study, no crashes have been recorded at the Ann Arbor crossings in the past five years. In the event of a crash, it is typical for the risk index to increase approximately threefold. Using these assumptions, the City of Ann Arbor would need to experience crashes at 15 of the 19 public vehicular crossings in the corridor before the quiet zone would not qualify under the NSRT threshold, a very unlikely scenario.
- The other major driver of the FRA risk calculations is train and traffic volumes. While roadway traffic volumes are not likely to increase significantly compared to current levels, there is potential for train volumes to increase from their current level of two per day. The base risk factor of the FRA's risk calculations is calculated as the squared root of the exposure index (daily train volumes multiplied by daily traffic volumes). Therefore, the approximate increase in the QZRI from additional trains can be calculated by dividing the squared root of the future train volumes by the squared root of current train volumes. This calculation shows that—all else remaining constant—train volumes in the corridor would need to increase to 15 per day before disqualifying the quiet zone.

While Scenario 1 will qualify for quiet zone implementation under the requirements of the FRA Train Horn Rule, SRF recommends that the City pursue an implementation scenario that qualifies under the RIWH threshold, making the corridor safer than current levels while simultaneously improving quality of life for surrounding communities. If the City pursues this improvement scenario, SRF recommends that additional crossing improvements be installed as the opportunities arise (e.g., coinciding with a planned roadway reconstruction project). This approach would have two distinct benefits: 1) The additional improvements will make the quiet zone risk calculations more resilient to crashes and future train or traffic volumes increases and 2) The City may eventually achieve sufficient risk reduction to qualify under the RIWH threshold, at which point the City may submit a quiet zone application and eliminate the need for the annual risk review.

RIWH Threshold

The following scenarios assume that improvements are implemented sufficient to lower the QZRI below the RIWH, theoretically making the corridor safety than it currently is today. As a general rule of thumb, scenarios should be developed such that the QZRI is approximately 10 percent lower than the RIWH. This approach helps to ensure that any minor changes in crossing conditions (e.g. traffic or train volumes, crossing crashes, updated FRA quiet zone risk calculator variables) will not result in the scenario no longer complying with the RIWH threshold prior to implementation.

Scenario 2: Cost Effective

The selection of improvements included in the Scenario 2 summary table below is based on an assessment of the cost-effectiveness of each improvement option as shown in Table 2. This table compares the reduction in QZRI to the cost of each improvement to calculate dollars per point of risk reduction. The crossing closure options are rated as being the most cost-effective since they are effectively cost neutral with the availability of MDOT closure incentive funds. The Dhu Varren Road median improvements are the most cost-effective non-closure option since the minimum warning devices have already been installed. The least cost-effective option is the medians at the Traver Road (000239M) crossing due to the high cost of widening and paving the roadway approaches. The cost of implementation, including roadway improvements, warning device upgrades, and a utility contingency is \$7,114,000.

Scenario 2	2: Cost Effective												
Crossing	Street	Baseline QZRI	RIWH	Eff. of New ASM		Final QZRI	Option	Improvement Summary	A	nn. Maint Costs	Signal Costs	ı	Roadway Costs
000240G	Dhu Varren Road	8,510	5,102	0.80		1,702	1	SSM Medians	\$	-	\$ -	\$	70,000
000239M	Traver Road	1,319	791	-		1,319	0	Signals Only	\$	2,000.00	\$ 250,000	\$	-
000236S	Barton Drive	10,217	6,125	0.40		6,130	1	ASM Medians	\$	2,400.00	\$ 300,000	\$	40,000
000235K	Traver Road	3,157	1,893	-		3,157	0	Signals Only	\$	2,000.00	\$ 250,000	\$	-
000234D	Bowen Street	1,244	746	-		1,244	0	Signals Only	\$	2,000.00	\$ 250,000	\$	-
000233W	Pontiac Trail	5,095	3,054	0.80		1,019	1	SSM Medians	\$	2,000.00	\$ 250,000	\$	56,000
000232P	Longshore Drive	3,066	1,838	-		3,066	0	Signals Only	\$	2,000.00	\$ 250,000	\$	-
000231H	Wright Street	1,509	905	-		1,509	0	Signals Only	\$	2,000.00	\$ 250,000	\$	-
000228A	W Summit Street	5,005	3,000	0.77	1	1,151	1	Four Quad Gate	\$	3,000.00	\$ 500,000	\$	2,000
000223R	W Liberty Street	7,721	4,629	0.67		2,574	1	ASM Medians	\$	2,000.00	\$ 250,000	\$	35,000
000221C	S First Street	5,563	3,335	-		5,563	0	Signals Only	\$	2,000.00	\$ 250,000	\$	-
000220V	William Street	8,845	5,303	0.53		4,128	1	ASM Medians	\$	2,000.00	\$ 250,000	\$	42,000
000219B	Ashley Street	3,598	2,157	-		3,598	0	Signals Only	\$	2,000.00	\$ 300,000	\$	-
000218U	W Jefferson Street	3,452	2,069	-		3,452	0	Signals Only	\$	2,000.00	\$ 300,000	\$	-
000215Y	S Main Street	5,896	3,535	-		5,896	0	Signals Only	\$	2,400.00	\$ 300,000	\$	-
000214S	E Madison Street	5,896	3,535	-		5,896	0	Signals Only	\$	2,400.00	\$ 300,000	\$	-
000213K	Hill Street	8,496	5,094	0.80		1,699	1	SSM Medians	\$	2,000.00	\$ 250,000	\$	99,500
000212D	E Hoover Avenue	6,670	3,999	0.60		2,668	1	ASM Medians	\$	2,400.00	\$ 300,000	\$	31,500
000209V	S State Street	11,725	7,029	0.80		2,345	1	SSM Medians	\$	2,400.00	\$ 400,000	\$	98,000
	Average	5,631	3,376			3,059		Total	\$	39,000	\$5,200,000	\$	474,000
				NSRT		14723			Roa	adway and	Signal	\$	5,674,000
				RIWH		3,376			Uti	lity Conting	gency	\$	1,440,000
				QZRI		3,059	0.91	(QZRI / RIWH)	TO	TAL		\$	7,114,000

Table 2. Cost-Effectiveness of Proposed Improvements

Crossing ID	Crossing Name	In	nprovement Option	Risk Reduction	QZRI	Total Improvement Cost	Dollars / QZRI Reduction
000239M	Traver Road	1	Closure	100%	1,319	\$-	\$-
000234D	Bowen Street	1	Closure	100%	1,244	\$-	\$-
000231H	Wright Street	1	Closure	100%	1,509	\$-	\$-
000218U	W Jefferson Street	2	Closure	100%	3,452	\$-	\$-
000219B	Ashley Street	3	Closure	100%	3,598	\$-	\$-
000240G	Dhu Varren Road	1	SSM Medians	80%	8,510	\$70,000	\$10.28
000213K	Hill Street	1	SSM Medians	80%	8,496	\$349,500	\$51.42
000209V	S State Street	1	SSM Medians	80%	11,725	\$498,000	\$53.09
000223R	W Liberty Street	1	ASM Medians	67%	7,721	\$285,000	\$55.37
000220V	William Street	1	ASM Medians	53%	8,845	\$292,000	\$61.90
000233W	Pontiac Trail	1	SSM Medians	80%	5,095	\$306,000	\$75.08
000212D	E Hoover Avenue	1	ASM Medians	60%	6,670	\$331,500	\$82.83
000236S	Barton Drive	1	ASM Medians	40%	10,217	\$340,000	\$83.20
000215Y	S Main Street	1	Four Quad Gate	77%	5,896	\$528,000	\$116.29
000221C	S First Street	1	ASM Medians	53%	5,563	\$345,450	\$116.44
000232P	Longshore Drive	1	SSM Delineators	75%	3,066	\$270,250	\$117.51
000235K	Traver Road	1	SSM Medians	80%	3,157	\$320,000	\$126.69
000228A	W Summit Street	1	Four Quad Gate	77%	5,005	\$502,000	\$130.27
000219B	Ashley Street	1	ASM Medians	50%	3,598	\$350,250	\$194.67
000231H	Wright Street	2	ASM Delineators	56%	1,509	\$269,500	\$317.51
000234D	Bowen Street	2	ASM Delineators	63%	1,244	\$270,250	\$344.27
000239M	Traver Road	2	SSM Medians	80%	1,319	\$520,000	\$492.89

Scenario 3: Cost Effective with One Closure

The use of crossing closures can reduce the total cost of quiet zone implementation by eliminating the need to upgrade warning devices at one or more crossings. The 100 percent risk reduction of a closure may also allow fewer improvements to be used at other crossings while still qualifying under the QZRI threshold. Scenario 3, presented below, proposes the improvements included in Scenario 2, but also includes the closure of Bowen Street. While this reduces the total cost of implementation from \$7,114,000 to \$6,784,000 (a difference of \$330,000), the reduction of risk is not sufficient to eliminate a separate crossing improvement.

Scenario 3	3: Cost Effective	with On	e Clos	ure									
Crossing	Street	Baseline QZRI	RIWH	Eff. of New ASM	Final QZRI	Option	Improvement Summary	A	nn. Maint Costs		Signal Costs	-	Roadway Costs
000240G	Dhu Varren Road	8,510	5,102	0.80	1,702	1	SSM Medians	\$	-	\$	-	\$	70,000
000239M	Traver Road	1,319	791	-	1,319	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000236S	Barton Drive	10,217	6,125	0.40	6,130	1	ASM Medians	\$	2,400.00	\$	300,000	\$	40,000
000235K	Traver Road	3,157	1,893	-	3,157	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000234D	Bowen Street	1,244	746	1.00	-	1	Closure	\$	-	\$	-	\$	-
000233W	Pontiac Trail	5,095	3,054	0.80	1,019	1	SSM Medians	\$	2,000.00	\$	250,000	\$	56,000
000232P	Longshore Drive	3,066	1,838	-	3,066	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000231H	Wright Street	1,509	905	-	1,509	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000228A	W Summit Street	5,005	3,000	0.77	1,151	1	Four Quad Gate	\$	3,000.00	\$	500,000	\$	2,000
000223R	W Liberty Street	7,721	4,629	0.67	2,574	1	ASM Medians	\$	2,000.00	\$	250,000	\$	35,000
000221C	S First Street	5,563	3,335	-	5,563	0	Signals Only	\$	2,000.00	\$	250,000	\$	-
000220V	William Street	8,845	5,303	0.53	4,128	1	ASM Medians	\$	2,000.00	\$	250,000	\$	42,000
000219B	Ashley Street	3,598	2,157	-	3,598	0	Signals Only	\$	2,000.00	\$	300,000	\$	-
000218U	W Jefferson Street	3,452	2,069	-	3,452	0	Signals Only	\$	2,000.00	\$	300,000	\$	-
000215Y	S Main Street	5,896	3,535	-	5,896	0	Signals Only	\$	2,400.00	\$	300,000	\$	-
000214S	E Madison Street	5,896	3,535	-	5,896	0	Signals Only	\$	2,400.00	\$	300,000	\$	-
000213K	Hill Street	8,496	5,094	0.80	1,699	1	SSM Medians	\$	2,000.00	\$	250,000	\$	99,500
000212D	E Hoover Avenue	6,670	3,999	0.60	2,668	1	ASM Medians	\$	2,400.00	\$	300,000	\$	31,500
000209V	S State Street	11,725	7,029	0.80	2,345	1	SSM Medians	\$	2,400.00	\$	400,000	\$	98,000
	Average	5,631	3,376		2,993		Total	\$	37,000	\$4	,950,000	\$	474,000
				NSRT	14723			Roa	adway and	Sign	al	\$	5,424,000
				RIWH	3,376			Uti	lity Conting	geno	су	\$	1,360,000
				QZRI	2,993	0.89	(QZRI / RIWH)	TO	ΓAL			\$	6,784,000

Scenario 4: Cost Effective with Two Closures

This scenario uses the crossing improvements under Scenario 2 as a starting point but closes both Bowen Street and Ashley Street. In this case, the use of two closures allows the removal of the proposed improvements at E Hoover Street, reducing the total cost from \$7,114,000 to \$6,372,500 (a difference of \$741,500). However, the reduction in total cost would need to be weighed against the impact to traffic circulation and access to properties adjacent to the crossings.

Scenario	4: Cost Effective	with Tw	o Clos	ures							
Crossing	Street	Baseline QZRI	RIWH	Eff. of New ASM	Final QZRI	Option	Improvement Summary	Α	nn. Maint Costs	Signal Costs	Roadway Costs
000240G	Dhu Varren Road	8,510	5,102	0.80	1,702	1	SSM Medians	\$	-	\$ -	\$ 70,000
000239M	Traver Road	1,319	791	-	1,319	0	Signals Only	\$	2,000.00	\$ 250,000	\$ -
000236S	Barton Drive	10,217	6,125	0.40	6,130	1	ASM Medians	\$	2,400.00	\$ 300,000	\$ 40,000
000235K	Traver Road	3,157	1,893	-	3,157	0	Signals Only	\$	2,000.00	\$ 250,000	\$ -
000234D	Bowen Street	1,244	746	1.00	-	1	Closure	\$	-	\$ -	\$ -
000233W	Pontiac Trail	5,095	3,054	0.80	1,019	1	SSM Medians	\$	2,000.00	\$ 250,000	\$ 56,000
000232P	Longshore Drive	3,066	1,838	-	3,066	0	Signals Only	\$	2,000.00	\$ 250,000	\$ -
000231H	Wright Street	1,509	905	-	1,509	0	Signals Only	\$	2,000.00	\$ 250,000	\$ -
000228A	W Summit Street	5,005	3,000	0.77	1,151	1	Four Quad Gate	\$	3,000.00	\$ 500,000	\$ 2,000
000223R	W Liberty Street	7,721	4,629	0.67	2,574	1	ASM Medians	\$	2,000.00	\$ 250,000	\$ 35,000
000221C	S First Street	5,563	3,335	-	5,563	0	Signals Only	\$	2,000.00	\$ 250,000	\$ -
000220V	William Street	8,845	5,303	0.53	4,128	1	ASM Medians	\$	2,000.00	\$ 250,000	\$ 42,000
000219B	Ashley Street	3,598	2,157	1.00	-	3	Closure	\$	-	\$ -	\$ -
000218U	W Jefferson Street	3,452	2,069	-	3,452	0	Signals Only	\$	2,000.00	\$ 300,000	\$ -
000215Y	S Main Street	5,896	3,535	-	5,896	0	Signals Only	\$	2,400.00	\$ 300,000	\$ -
000214S	E Madison Street	5,896	3,535	-	5,896	0	Signals Only	\$	2,400.00	\$ 300,000	\$ -
000213K	Hill Street	8,496	5,094	0.80	1,699	1	SSM Medians	\$	2,000.00	\$ 250,000	\$ 99,500
000212D	E Hoover Avenue	6,670	3,999	-	6,670	0	Signals Only	\$	2,400.00	\$ 300,000	\$ -
000209V	S State Street	11,725	7,029	0.80	2,345	1	SSM Medians	\$	2,400.00	\$ 400,000	\$ 98,000
	Average	5,631	3,376		3,015		Total	\$	35,000	\$4,650,000	\$ 442,500
				NSRT	14723			Ro	adway and	Signal	\$ 5,092,500
				RIWH	3,376			Uti	lity Conting	gency	\$ 1,280,000
				QZRI	3,015	0.89	(QZRI / RIWH)	TO	TAL		\$ 6,372,500

Scenario 5: High Safety

This scenario proposes crossing improvements that would result in the highest levels of safety throughout the corridor. Only two crossings, W Jefferson Avenue and E Madison Street would receive no ASM or SSM crossing improvements. All other crossings would receive improvements ranging from ASM channelized delineators to four-quadrant gates. The cost of implementation, including roadway improvements, warning device upgrades, and a utility contingency is \$7,887,700.

Scenario !	5: High Safety											
Crossing	Street	Baseline QZRI	RIWH	Eff. of New ASM	Final QZRI	Option	Improvement Summary	Aı	nn. Maint Costs	Signal Costs	1	Roadway Costs
000240G	Dhu Varren Road	8,510	5,102	0.80	1,702	1	SSM Medians	\$	-	\$ -	\$	70,000
000239M	Traver Road	1,319	791	0.80	264	2	SSM Medians	\$	2,000.00	\$ 250,000	\$	270,000
000236S	Barton Drive	10,217	6,125	0.40	6,130	1	ASM Medians	\$	2,400.00	\$ 300,000	\$	40,000
000235K	Traver Road	3,157	1,893	0.80	631	1	SSM Medians	\$	2,000.00	\$ 250,000	\$	70,000
000234D	Bowen Street	1,244	746	0.63	459	2	ASM Delin.	\$	2,000.00	\$ 250,000	\$	20,250
000233W	Pontiac Trail	5,095	3,054	0.80	1,019	1	SSM Medians	\$	2,000.00	\$ 250,000	\$	56,000
000232P	Longshore Drive	3,066	1,838	0.75	767	1	SSM Delin.	\$	2,000.00	\$ 250,000	\$	20,250
000231H	Wright Street	1,509	905	0.56	660	2	ASM Delin.	\$	2,000.00	\$ 250,000	\$	19,500
000228A	W Summit Street	5,005	3,000	0.77	1,151	1	Four Quad Gate	\$	3,000.00	\$ 500,000	\$	2,000
000223R	W Liberty Street	7,721	4,629	0.67	2,574	1	ASM Medians	\$	2,000.00	\$ 250,000	\$	35,000
000221C	S First Street	5,563	3,335	0.53	2,596	1	ASM Medians	\$	2,000.00	\$ 250,000	\$	95,450
000220V	William Street	8,845	5,303	0.53	4,128	1	ASM Medians	\$	2,000.00	\$ 250,000	\$	42,000
000219B	Ashley Street	3,598	2,157	0.50	1,799	1	ASM Medians	\$	2,000.00	\$ 300,000	\$	50,250
000218U	W Jefferson Street	3,452	2,069	-	3,452	1	Signals Only	\$	2,000.00	\$ 300,000	\$	-
000215Y	S Main Street	5,896	3,535	0.77	1,356	1	Four Quad Gate	\$	2,400.00	\$ 500,000	\$	28,000
0002145	E Madison Street	5,896	3,535	-	5,896	0	Signals Only	\$	2,400.00	\$ 300,000	\$	-
000213K	Hill Street	8,496	5,094	0.80	1,699	1	SSM Medians	\$	2,000.00	\$ 250,000	\$	99,500
000212D	E Hoover Avenue	6,670	3,999	0.60	2,668	1	ASM Medians	\$	2,400.00	\$ 300,000	\$	31,500
000209V	S State Street	11,725	7,029	0.80	2,345	1	SSM Medians	\$	2,400.00	\$ 400,000	\$	98,000
	Average	5,631	3,376		2,173		Total	\$	39,000	\$5,400,000	\$	1,047,700
				NSRT	14723			Roa	dway and	Signal	\$	6,447,700
				RIWH	3,376			Uti	lity Conting	gency	\$	1,440,000
				QZRI	2,173	0.64	(QZRI / RIWH)	TO	ΓAL		\$	7,887,700

Phased Implementation

In addition to implementing the quiet zone as a single corridor, the City also has the option of implementing the quiet zone in phases. The only requirement for breaking the quiet zone into smaller segments is that there must be at least one quarter mile between the last quiet zone crossing and the next non-quiet zone crossing. The two scenarios below assume that the quiet zone is split between W Summit Street and Wright Street.

Scenario 6: North of Summit

The scenario summarized below includes the crossings between Dhu Varren Road and Wright Street. The proposed improvements match those proposed under the cost-effective Scenario 2. The cost of implementation, including roadway improvements, warning device upgrades, and a utility contingency is \$2,526,000.

Scenario (6: Phased, North	of Sumi	mit								
Crossing	Street	Baseline QZRI	RIWH	Eff. of New ASM	Final QZRI	Option	Improvement Summary	A	nn. Maint Costs	Signal Costs	Roadway Costs
000240G	Dhu Varren Road	8,510	5,102	0.80	1,70	2 1	SSM Medians	\$	-	\$ -	\$ 70,000
000239M	Traver Road	1,319	791	-	1,31	9 (Signals Only	\$	2,000.00	\$ 250,000	\$ -
000236S	Barton Drive	10,217	6,125	0.40	6,13) 1	ASM Medians	\$	2,400.00	\$ 300,000	\$ 40,000
000235K	Traver Road	3,157	1,893	-	3,15	7 (Signals Only	\$	2,000.00	\$ 250,000	\$ -
000234D	Bowen Street	1,244	746	-	1,24	4 (Signals Only	\$	2,000.00	\$ 250,000	\$ -
000233W	Pontiac Trail	5,095	3,054	0.80	1,01	9 :	SSM Medians	\$	2,000.00	\$ 250,000	\$ 56,000
000232P	Longshore Drive	3,066	1,838	-	3,06	6 (Signals Only	\$	2,000.00	\$ 250,000	\$ -
000231H	Wright Street	1,509	905	-	1,50	9 (Signals Only	\$	2,000.00	\$ 250,000	\$ -
	Average	4,265	2,557		2,39	3	Total	\$	14,400	\$1,800,000	\$ 166,000
				=		_					
				NSRT	1472	3		Roa	adway and	Signal	\$ 1,966,000
				RIWH	2,55	7		Uti	lity Conting	gency	\$ 560,000
				QZRI	2,39	0.94	(QZRI / RIWH)	TO	TAL		\$ 2,526,000

Scenario 7: Summit and South

The scenario summarized below includes the crossings south between W Summit Street and S State Street. The proposed improvements match those proposed under the cost-effective Scenario 2. The cost of implementation, including roadway improvements, warning device upgrades, and a utility contingency is \$4,588,000.

Scenario	7: Phased, Summ	it and S	outh								
Crossing	Street	Baseline QZRI	RIWH	Eff. of New ASM	Final QZRI	Option	Improvement Summary	A	nn. Maint Costs	Signal Costs	Roadway Costs
000228A	W Summit Street	5,005	3,000	0.77	1,151	1	Four Quad Gate	\$	3,000.00	\$ 500,000	\$ 2,000
000223R	W Liberty Street	7,721	4,629	0.67	2,574	1	ASM Medians	\$	2,000.00	\$ 250,000	\$ 35,000
000221C	S First Street	5,563	3,335	-	5,563	0	Signals Only	\$	2,000.00	\$ 250,000	\$ -
000220V	William Street	8,845	5,303	0.53	4,128	1	ASM Medians	\$	2,000.00	\$ 250,000	\$ 42,000
000219B	Ashley Street	3,598	2,157	-	3,598	0	Signals Only	\$	2,000.00	\$ 300,000	\$ -
000218U	W Jefferson Street	3,452	2,069	-	3,452	0	Signals Only	\$	2,000.00	\$ 300,000	\$ -
000215Y	S Main Street	5,896	3,535	-	5,896	0	Signals Only	\$	2,400.00	\$ 300,000	\$ -
000214S	E Madison Street	5,896	3,535	-	5,896	0	Signals Only	\$	2,400.00	\$ 300,000	\$
000213K	Hill Street	8,496	5,094	0.80	1,699	1	SSM Medians	\$	2,000.00	\$ 250,000	\$ 99,500
000212D	E Hoover Avenue	6,670	3,999	0.60	2,668	1	ASM Medians	\$	2,400.00	\$ 300,000	\$ 31,500
000209V	S State Street	11,725	7,029	0.80	2,345	1	SSM Medians	\$	2,400.00	\$ 400,000	\$ 98,000
	Average	6,624	3,971		3,543		Total	\$	24,600	\$3,400,000	\$ 308,000
				NSRT	14723			Roa	adway and	Signal	\$ 3,708,000
				RIWH	3,971			Uti	lity Conting	gency	\$ 880,000
				QZRI	3,543	0.89	(QZRI / RIWH)	TO	TAL		\$ 4,588,000

Improvement Scenario Summary

A summary of the improvement scenarios described above is shown in Table 3. This table includes the change in risk level as a result of the proposed improvements as well as a cost breakdown of the signal installation costs, roadway improvement costs, and the utility contingency applied to each scenario. The table also includes the annual maintenance costs associated with the upgraded signals for each scenario.

Table 3. Improvement Scenario Summary

Improvement Scenario	Change in Risk (RIWH to QZRI)	Signal Costs	Roadway Improvement Costs	Utility Contingency	TOTAL	Annual Maintenance Costs
Scenario 1: Signal Upgrades Only	3,376 → 5,428	\$5,200,000	\$2,000	\$1,440,000	\$6,642,000	\$39,000
Scenario 2: Cost Effective	3,376 → 3,376	\$5,200,000	\$474,000	\$1,440,000	\$7,114,000	\$39,000
Scenario 3: Cost Effective with One Closure	3,376 → 2,993	\$4,950,000	\$474,000	\$1,360,000	\$6,784,000	\$37,000
Scenario 4: Cost Effective with Two Closures	3,376 → 3,015	\$4,650,000	\$442,500	\$1,280,000	\$6,372,500	\$35,000
Scenario 5: High Safety	3,376 → 2,173	\$5,400,000	\$1,047,700	\$1,440,000	\$7,887,700	\$39,000
Scenario 6: Phased, North	2,557 → 2,393	\$1,800,000	\$166,000	\$560,000	\$2,526,000	\$14,400
Scenario 7: Phased, South	3,971 → 3,543	\$3,400,000	\$308,000	\$880,000	\$4,588,000	\$24,600

Next Steps and Implementation Timeline

The next step for the City is to determine the preferred crossing improvement scenario. As described, all the proposed scenarios will qualify for quiet zone implementation. The City will need to determine which scenario provides the best balance between cost, safety, and property access and traffic circulation impacts. Once the appropriate crossing improvement options have been selected, there are several steps necessary to implement a quiet zone.

- 1. **Notice of Intent:** The first step in the quiet zone implementation process is the submittal of a Quiet Zone Notice of Intent (NOI) to the FRA, AA Railroad, MDOT, private crossing owners, and any other applicable stakeholders. The NOI outlines the proposed crossing improvements the City intends to use to qualify for quiet zone implementation. All recipients of the NOI are allowed 60 days to provide comment.
- 2. Quiet Zone Application: Many of the proposed improvements described in this report include the use of Alternative Safety Measure (ASM) improvements. When ASM improvements are used, a Quiet Zone Application must be submitted to the FRA following the NOI 60-day comment period. The Application is subject to a minimum 60-day comment period for all stakeholders and must then be approved by the FRA. It is estimated that the FRA will take nine to twelve months to complete to complete this review.
- 3. **Request for CWT Requirement Waiver:** During the diagnostic review, it as noted that some crossings—specifically S Main Street and E Madison Street—may have difficulty with CWT detection upgrades. The City and AA Railroad have the option of jointly filing a request to the FRA to waive the CWT requirement at this crossing.
- 4. Construct Improvements: Once the Quiet Zone Application has been approved, the City may begin construction of the proposed crossing improvements. The City must also install advance warning signs and pavement markings conforming to the MUTCD standards, including the installation of "No Train Horn" signs to notify the public that train horns will no longer routinely sound at these crossings. Installation of the warning device upgrades will need to be coordinated with AA Railroad.
- 5. **Notice of Establishment:** Once the proposed improvements have been constructed, the City must then submit a Quiet Zone Notice of Establishment (NOE) to the FRA and all applicable stakeholders. The railroad must cease the routine sounding of horns 21 days after the submittal of this final notice.

After the quiet zone is implemented, the City will be required to provide updates to the FRA on a routine basis confirming that the improvements used to qualify for the quiet zone are still in place. If the quiet zone is established by meeting the RIWH threshold, the City must provide a letter every three years confirming the continued presence of the quiet zone crossing improvements. If the quiet zone is established by meeting only the NSRT threshold, FRA staff will complete an annual risk assessment to confirm that the quiet zone is still within the NSRT threshold and will notify the City of the results. If the NSRT threshold is no longer met, the City will have six months to develop an action plan for adding additional improvements to bring the quiet zone under the NSRT threshold and three years to install these improvements before the quiet zone is terminated.

Appendix A: Diagnostic Meeting Minutes





ANN ARBOR, MI

QUIET ZONE DIAGNOSTIC MEETING

MEETING MINUTES 8:00 A.M. October 3, 2018

ATTENDEES:

Eli Cooper, City of Ann Arbor Cynthia Redinger, City of Ann Arbor Kevin Braun, City of Ann Arbor Tammy Wagner, FRA John Vance, Ann Arbor Railroad Dustin Seward, CDL Electric Todd Osment, CDL Electric Mark Smallwood, CDL Electric Kris Foondle, MDOT Jamie Goff, MDOT Tony Alee, MDOT Judy Kirkdorffer, University of Michigan Andy Mielke, SRF Consulting Group Chris Ryan, SRF Consulting Group Joe Lampe, SRF Consulting Group

The diagnostic meeting participants, including representatives from the City of Ann Arbor, the Federal Railroad Administration (FRA), the Michigan Department of Transportation (MDOT), the Ann Arbor Railroad (AAR), CDL Electric, and the University of Michigan met at the City of Ann Arbor City Hall building to discuss the steps necessary to implement a quiet zone in the City of Ann Arbor under the FRA's Train Horn Rule. A copy of the sign-in sheet with contact information is provided as an attachment.

The meeting began with introductions and a brief project overview. The purpose of the meeting was to investigate and gather input on the various Supplemental Safety Measure (SSM) and Alternative Safety Measure (ASM) options available at each crossing in the proposed quiet zone. The quiet zone diagnostic meeting is also an opportunity to identify other concerns or issues related to the crossing such as safety, traffic operations, construction needs, etc. The review consisted of nineteen public vehicular crossings and two private crossings along AAR's Mainline Subdivision through the city.

- South State Street
- Private Crossing (University)
- East Hoover Avenue
- Hill Street
- East Madison Street
- South Main Street
- Private Crossing
- West Jefferson Street
- Ashley Street
- William Street
- South First Street

- West Liberty Street
- Summit Street
- Wright Street
- Longshore Drive
- Pontiac Trail
- Bowen Street
- Traver Road
- Barton Drive
- Traver Road
- Dhu Varren Road

Informational packets distributed to the group included the following materials. Note that USDOT accident/incident forms were reviewed for each crossing, but no crashes have occurred since June 2011, outside of the five-year window used by the FRA's risk calculations. USDOT grade crossing inventory forms for each crossing were also made available to the group but were not included in the individual information packets.

- 1. Aerial maps showing the layout of each crossing
- 2. A blank evaluation sheet for the diagnostic team members to document the preferred SSM/ASM improvement options and other field notes
- 3. Quiet Zone terminology reference sheet

Eli Cooper (City of Ann Arbor) briefed the group on the City's current plans for roadways at several crossings. Eli continued to brief the group regarding the past history and discussions surrounding a potential quiet zone within the City. Chris Ryan (SRF) reviewed the process quiet zone diagnostic process and the site visit logistics to the group.

The first requirement for quiet zone implementation is that all public crossings in the proposed quiet zone be equipped with the minimum warning device requirements of gates, flashing lights, power out indicators, and constant warning time detection. None of the crossing in the proposed Ann Arbor quiet zone meet these minimum requirements. All public crossings included in the quiet zone will need to be upgraded in coordination with AAR prior to quiet zone implementation. Construction of these upgrades would be completed by AAR at the City's cost. The City would also be required to pay annual fees to AAR for the maintenance of the signal systems. These annual fees will range between \$1,978 and \$2,398 depending on the number of tracks and whether cantilevers are required.¹

Attendees then headed to the field to visit the crossings to conduct a diagnostic review and to discuss potential safety measure updates for the crossings in the proposed quiet zone. John Vance (AAR) gave a general safety briefing and code of conduct for crossing site visits. A summary of the notes, discussion items, and recommended improvements for each crossing is provided in the tables on the following pages. General comments from the meeting that apply to all crossings are as follows:

- AAR and MDOT representatives confirmed that no crossings are equipped with all
 minimum requirements of gates, flashing lights, power out indicators, and constant
 warning time (CWT) detection. Every crossing included in the proposed quiet zone will
 need to be upgraded to meet the minimum requirements.
- AAR confirmed that the train volumes listed in the FRA inventory are correct and current as of October 2018 and noted that current train volumes in the corridor are approximately two per day. The City will use two trains per day for the quiet zone risk calculation.
- It was noted that quiet zone will eliminate only the routine sounding of horns at the proposed crossings. Train horns may still be sounded in the case of an emergency (vehicle, person, or animal on the track) or if construction activity is occurring adjacent to the tracks. It was also stressed that the sounding of the Amtrak trains on the Norfolk Southern rail line will not be affected by the proposed AAR quiet zone.

¹ https://www.michigan.gov/mdot/0,4616,7-151-22444 56486-343808--,00.html

- The City will need to collect updated traffic volumes prior to pursuing quiet zone implementation. The FRA prefers counts collected within one to three years.
- Non-traversable medians were discussed as improvement options at many of the crossings. However, median lengths at many crossings are limited by the confined geometry and nature of each crossing.
 - O Non-traversable medians are required to be at least six inches high to qualify as SSMs or ASMs. The City is encouraged to use eight-inch-high curbs to ensure that this requirement is met. This will allow for a small degree of construction error and also allows for a future pavement overlay without impacting the curb height requirement.
 - To qualify as an SSM improvement, median must be at least 100 feet long measured from the gate arm to the last full-height section of the median.
 However, SSM median lengths may be reduced to as little as 60 feet if a public roadway or commercial access prevents the installation of a longer median.
 - o Medians less than 60 feet may be implemented but qualify as ASM improvements and require the submittal of a Quiet Zone Application to the FRA.
 - Channelization devices may be used in a similar manner to non-traversable medians and are subject to the same length requirements. These improvements are useful in cases where roadway width may prevent the installation of medians. Channelization devices are more easily damaged than medians, and must be properly maintained to remain compliant with the Train Horn Rule.
- Roadway closures were also discussed as improvement options at several of the
 residential crossings with lower traffic volumes and dangerous rail-roadway geometry.
 Representatives from the City mentioned that roadway closures are not a strong interest
 by the City nor with residents but will be considered as a potential quiet zone
 implementation strategy. Incentive funding for rail closures may be available from
 MDOT. The amount of funding is dependent on the traffic volumes as well as the number
 of closures that are pursued.
- AAR mentioned that pedestrian activity at crossings is a concern, especially in areas of high residential density and near the University of Michigan campus. AAR is concerned with high pedestrian traffic and students listening to music who may be unaware of a passing train, even while sounding its horn. Eli Cooper mentioned that in Ann Arbor almost 20 percent of residents commute on foot, and over 5 percent commute using a bicycle. The diagnostic team recommended that pedestrian-focused warning signage be considered at crossings with high pedestrian activity.
- At many crossings, the diagnostic team noted short vehicle storage distance between adjacent roadways and the tracks. The City should consider installing "DO NOT STOP ON TRACKS" signs at crossings with short storage distances.
- All crossings will need to be equipped with "No Train Horn" signs if a quiet zone is implemented. Other rail crossing signage and pavement markings consistent with the guidance in the Manual on Uniform Traffic Control Devices (MUTCD) were also recommended.

- The Treeline Allen Creek Urban Trail is a planned urban trail that is proposed to run parallel to the railroad tracks.² Proposed crossing improvements will need to be considered in coordination with planned trail improvements.
- MDOT representatives recommended that 12-inch LEDs be used for flashing light configurations at all crossing receiving warning device upgrades.
- Multiple crossing locations have the potential for conflicts between utility lines and gate arms. In some cases, this may be addressed through gate mast placement. Other cases may require utility relocation.
- "No Treatment" is indicated as a potential option for many crossings. While not ideal, the Train Horn Rule does not require the implementation of SSMs or ASMs at every crossing in a quiet zone so long as the risk calculations are satisfied for the quiet zone as a whole. Note that this option would still require the installation of minimum warning device requirements at each crossing.

S. State Street	FRA Crossing ID: 000	209V
Crossing Improvement Options (Rank Top 3):		
4-Quadrant Gate 1 Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	2No Treatment

Current Configuration:

- The crossing currently consists of one AAR track, two northbound travel lanes, two southbound travel lanes, and two westbound travel lanes at Stimson Street. All approaches to the crossing are equipped with cantilevers and flashing lights.
- Sidewalks are located on each side of the roadway. A signaled pedestrian crossing is located at the northwestern corner of the intersection.
- Two 5' bike lanes are present along State Street in each direction.
- There is a gated access to a golf course in the southwest quadrant of the crossing. The City noted that this access is used 7-8 times per year for police access and game day related vehicle access.

- The proposed improvements include a 100' non-traversable median to the north and south and 79' non-traversable median to the east. A longer median is prevented by a commercial access on the south side of the road. The proposed medians would qualify as SSM full-length non-traversable medians.
- The proposed configuration would also be equipped with gates and flashing lights.
- The diagnostic team recommended NO TRAIN HORN signs for the pedestrian pathway on the west side of the State Street.

https://www.a2gov.org/departments/systems-planning/programs/Documents/Allen%20Creek%20Greenway%20Master%20Plan%20Project/Treeline_MasterPlan_Draft_v11.pdf

Private Crossing (University) FRA Crossing ID: 000211W Crossing Improvement Options (Rank Top 3): 4-Quadrant Gate 3-Quadrant Gate Non-Traversable Medians Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators **Channelized Delineators** No Wayside Horns 1 Other (Describe): crossbucks and stop signs Treatment Closure on both sides of tracks **One-Way Streets**

Notes:

Current Configuration:

- The crossing currently consists of two AAR tracks. The USDOT crossing inventory forms indicate that this is a pedestrian crossing. However, while the crossing is primarily used for pedestrians, university utility vehicles also use this crossing. The crossing inventory should be updated to reflect a designation as a highway crossing. University staff confirmed that this crossing is heavily used on football game days, as students and other fans make their way from parking lots and residential areas to Michigan Stadium.
- The crossing is currently equipped only with crossbucks.

- As a private crossing, the FRA does not require gates, flashing, lights, power-out indicators, or CWT detection. At a minimum, private crossings must be equipped with crossbucks and stop signs. It is up to the diagnostic team to determine if additional improvements are necessary.
- The diagnostic team noted that both crossbucks are located on the north side of the crossing. Each crossbuck should be located on the right side of the approaching roadway.
- The diagnostic team recommended the consideration of gates at the crossing, accessible only for authorized card holders and pedestrians on game days. The proposed gates would not be connected to the rail system.
- It was noted that AAR typically avoids train movements near game times to reduce the potential threat to pedestrians and vehicles using the crossing.

E. Hoover Avenue		FRA Crossing ID: 000	212D
Crossing Improvement Options (Rank Top	3):		
4-Quadrant GateNon-Traversable MediansChannelized DelineatorsWayside HornsClosureOne-Way Streets		3-Quadrant Gate1 Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	_2 No Treatment
Notes:			
Current Configuration:			

- The crossing currently consists of one AAR track, one eastbound travel lane and one
 westbound travel lane. All approaches to the crossing are equipped with crossbucks and
 flashing lights.
- Sidewalks and 5' bike lanes are located on each side of the roadway in each direction at the crossing.

Proposed Improvements:

• The proposed improvements include non-traversable medians of 52' to the east and 44' to the west. Longer medians are not possible due to the proximity of commercial accesses. A commercial access in the southwest quadrant would be located within the median extents and would be limited to right-in/right-out turn movements. The proposed medians would qualify as ASM reduced-length non-traversable medians.

Hill Street	FRA Crossing ID: 000213K
Crossing Improvement Options (Rank Top 3):	
	3-Quadrant Gate 1 Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe): 2 No 1 Treatment

Notes:

Current Configuration:

- The crossing currently consists of two AAR tracks, one eastbound travel lane and one westbound travel lane. All approaches to the crossing are equipped with crossbucks and flashing lights.
- Sidewalks and 5' bike lanes are located on each side of the roadway in each direction at the crossing.

- Commercial accesses are in close proximity to the crossing on each approach, posing major difficulties for installing non-traversable medians without severely impacting property access. The accesses may also need to be modified to allow for the installation of gates.
- If the accesses can be modified and/or limited to right-in/right-out turning movements, it may be possible to install 70' medians to the east of the crossing and 15' medians west of the crossing (longer medians up to 100' may be possible through a reconfiguration of the access to the property in the northwest quadrant). The medians would qualify as ASM improvements.

E. Madison Street FRA Crossing ID: 0002) 214 S		
Crossing Improvement Options (Rank Top 3):				
4-Quadrant Gate Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	<u>1</u> No Treatment		

Current Configuration:

- The crossing currently consists of one AAR track, one eastbound travel lane and one westbound travel lane. All approaches to the crossing are equipped with crossbucks and cantilevers with flashing lights.
- Sidewalks are located on each side of the roadway in each direction at the crossing.
- This crossing and the adjacent crossing at Main Street are scheduled for an upgrade to include pre-signals. Both crossings would will also be controlled from a single bungalow. The upgrade is scheduled for April/May of 2019. CWT will not be included in this upgrade.
- There is an abandoned siding track to the east of the crossing. AAR noted that this track is scheduled for removal.

Proposed Improvements:

- AAR noted that this crossing and the adjacent Main Street crossing are likely to have
 issues with CWT detection due to the propensity for the track ballast to become
 saturated with water runoff, particularly in the winter when roads have been salted. The
 City and AAR have the option of submitting a Request for Waiver of CWT Requirement to
 the FRA. The FRA would then determine if CWT is reasonably practical at this crossing.
- Multiple commercial accesses are in close proximity to the crossing in all crossing quadrants, posing major challenges for installing non-traversable medians.
- Due to the commercial access complications, no treatment is recommended at this crossing.

S. Main Street	FRA Crossing ID: 000	215Y			
Crossing Improvement Options (Rank Top 3):					
	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	_2_ No Treatment			
Notes:					
Current Configuration:					
 The crossing currently consists of one AAR track, two northbound travel lanes and two southbound travel lanes. All approaches to the crossing are equipped with crossbucks and cantilevers with flashing lights. 					

Sidewalks are located on each side of the roadway in each direction at the crossing.

<u>Proposed Improvements:</u>

- Commercial accesses are located in close proximity to the crossing in all four quadrants, making the use of non-traversable medians difficult.
- Four-quadrant gates are proposed as a potential improvement at this crossing. Due to the skew of the crossing, the placement of the entry and exit gates on each side would be staggered, requiring the placement of a non-traversable median between the gates.
- No treatment was also discussed a potential option at this crossing.
- A road diet was discussed for the roadway approaches to this crossing. This would involve reducing the four-lane roadway to three lanes, with one center left turn lane.
- See notes for E. Madison Street regarding planned MDOT pre-signal project and CWT Detection issues.
- Due to higher pedestrian volumes pedestrian scale NO TRAIN HORN signs should be considered at this crossing on each sidewalk.

Private Crossing	FRA Crossing ID: 000216F		
Crossing Improvement Options (Rank Top 3):			
4-Quadrant Gate Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators No 1 Other (Describe): Crossbucks and stop signs on each side of the crossing		

Notes:

Current Configuration:

- The crossing currently consists of one AAR track, located within a private parking lot used for the employees of an adjacent building.
- There are crossbucks at the crossing, although the diagnostic team noted they are not in the proper locations.

Proposed Improvements:

 The proposed upgrade to the crossing consists of installing crossbucks with stop signs in the correct locations. The standard location for these signs would interfere with traffic movements. The placement of the crossbucks and stop signs will need to be coordinated further with MDOT and FRA.

W. Jefferson Street FRA Crossing ID:)218U			
Cr	Crossing Improvement Options (Rank Top 3):				
CCN4c:	4-Quadrant Gate Non-Traversable Medians Channelized Delineators Wayside Horns 2 Closure One-Way Streets	ΣοΜος	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	<u>1</u> No Treatment	

Current Configuration:

- The crossing currently consists of one AAR track, one eastbound travel lane and one westbound travel lane. All approaches to the crossing are equipped with crossbucks and cantilevers with flashing lights.
- Sidewalks are located on each side of the roadway in each direction at the crossing.
- This crossing is located in extremely close proximity to the next crossing at Ashley Street.

<u>Proposed Improvements:</u>

- Commercial accesses are located in close proximity on each side of the westbound approach. Ashley Street is located in close proximity on the eastbound approach. These issues severely limit the potential to use non-traversable medians.
- Closure was discussed as a potential option at this crossing given relatively lower traffic volumes (1,126 vehicles per day, 2010 data).

Notes:

Current Configuration:

- Ashley Street is currently a one-way street with a single lane in the northbound direction.
 The City will be reconfiguring this crossing to a two-way street. Proposed improvements
 will assume a two-way configuration and an upgrade to include the minimum warning
 device requirements.
- Sidewalks are located on each side of the roadway at the crossing.

- Access to a residential townhouse development is located on the east side of the roadway immediately north of the crossing. This access would be located between the proposed southbound gate arm and the tracks and an additional gate for westbound traffic coming out of the development may be required.
- Non-traversable medians were proposed as a potential option at this crossing include 15' of median to the south and 100' of median to the north.
- Closure was discussed as a potential option at this crossing.

V	William Street FRA Crossing ID: 0002				
С	Crossing Improvement Options (Rank Top 3):				
	 4-Quadrant Gate Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets 	3-Quadrant Gate 1 Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	_2_ No Treatment		

Current Configuration:

- The crossing currently consists of one AAR track, one eastbound travel lane and two westbound travel lanes. All approaches to the crossing are equipped with cantilevers, flashing lights, and crossbucks.
- The City has planned the installation of a protected cycle track on the north side of the roadway. The westbound left turn lane will be removed to allow for this installation.
- Sidewalks are located on each side of the roadway.

Proposed Improvements:

• The proposed improvements include a 100' non-traversable median to the east and 20' non-traversable median to the west. The proposed medians would qualify as ASM reduced-length non-traversable medians.

S	S. First Street FRA Crossing ID: 0002			221C
Cr	ossing Improvement Options (Rank Top 3):			
SSMe.	4-Quadrant Gate Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets	ASMs:	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	_2_No Treatment

Notes:

Current Configuration:

- S. First Street is currently a one-way street with two travel lanes in the southbound direction. A five foot bike lane exists on the east side of the road the bike lane ends at the RR crossing. The City will be reconfiguring this crossing to a two-way street.
 Proposed improvements will assume a two-way configuration and an upgrade to include the minimum warning device requirements.
- The City is also planning the installation of a protected cycle track on this street.
- Sidewalks are located on each side of the roadway.

Proposed Improvements:

 Access to a commercial parking lot is located on the east side of the roadway immediately north of the crossing. This access would be located between the proposed southbound gate arm and the tracks. The diagnostic team recommended relocating this access to the north.

- The proposed improvements include a 100' non-traversable median to the south and a 20' non-traversable median to the north. A longer median is not possible to the north of the crossing due to the location of the commercial parking lot access on the east side of the road. The proposed medians would qualify as ASM reduced-length non-traversable medians.
- If medians are installed south of the crossing, the eleven angled parking spaces to the south of the crossing must be removed.
- A small service access is located immediately south of the crossing on the west side of the road. The City will coordinate with the property owner to determine the frequency of use for the access and the potential for closure of the access.

W. Liberty Street FRA Crossing ID: 0002		223R
Crossing Improvement Options (Rank Top 3):		
4-Quadrant Gate Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	2_ No Treatment

Current Configuration:

- The crossing currently consists of one AAR track, one westbound travel lane and one
 eastbound travel lanes (diverging to one through and one right-turn east of the crossing).
 All approaches to the crossing are equipped with crossbucks and flashing lights.
- Sidewalks are located on each side of the roadway.
- A 5' bike lane is present along both the eastbound and westbound travel directions.

Proposed Improvements:

The proposed improvements include a 60' non-traversable median to the west and a 40' non-traversable median to the east. Longer medians are not possible due to the proximity of First Street to the east and a commercial parking lot access to the west on the north side of the roadway. The proposed medians would qualify as ASM reducedlength non-traversable medians.

W. Summit Street 000228A FRA Crossing ID: Crossing Improvement Options (Rank Top 3): 1 4-Quadrant Gate 3-Quadrant Gate Non-Traversable Medians Reduced Length Non-Traversable Medians **Channelized Delineators** Reduced Length Channelized Delineators No Wayside Horns 2 Other (Describe): Treatment Closure Exclude from quiet zone **One-Way Streets**

Notes:

Current Configuration:

- The crossing currently consists of one AAR track, one westbound travel lane and one eastbound travel lane. An intersection with two public roadways (Wildt Street, Hiscock Street) is located immediately to the west of the crossing on each side of the road.
- All approaches to the crossing are equipped with crossbucks and flashing lights.
 Cantilever-mounted flashing lights are provided for the approaches from Wildt Street and Hiscock Street.
- Sidewalks are located on each side of the roadway.

Proposed Improvements:

- The proximity of the roadway intersections west of the crossing prevents the installation of non-traversable medians on the eastbound approach. Medians would be possible if the intersection with Wildt Street (to the north and west of the crossing) was closed, but this would require a substantial detour for residents on Wildt Street. A median on the eastbound approach would also limit the intersection with Hiscock Street to right-in/right-out movements. This would substantially alter travel patterns for vehicle going to and from Triangle towing to the south of the crossing.
- Due to the complexity of the crossing and adjacent intersection, the diagnostic team recommended the installment of four-quadrant gates at this crossing.
- Alternatively, as this crossing is more than a quarter mile from the next nearest crossing to either the north or the south, it could be excluded from the quiet zone entirely.

Wright Street 000231H FRA Crossing ID: Crossing Improvement Options (Rank Top 3): 4-Quadrant Gate 3-Quadrant Gate Non-Traversable Medians Reduced Length Non-Traversable Medians **Channelized Delineators** 2 Reduced Length Channelized Delineators 3_ No **Wayside Horns** Other (Describe): Treatment 1 Closure **One-Way Streets** Notes: **Current Configuration:**

- The crossing currently consists of one AAR track, one northbound travel lane and one southbound travel lane. All approaches to the crossing are equipped with crossbucks and stop signs.
- Sidewalks are located on each side of the roadway.

• AAR noted that train speed increases to 15 mph at this crossing and the remaining crossings to the north.

Proposed Improvements:

- The diagnostic team identified this crossing as a candidate for closure due to low traffic volumes (150 vehicles per day, 2010 data).
- Due to narrow roadway width, channelization devices were identified as a potential improvement option at this crossing, including 30' channelization to the north and 100' channelization to the south. The proposed improvements would qualify as ASM reduced-length channelized delineators.

Longshore Drive FRA Crossing ID: 000)232P	
Crossing Improvement Options (Rank Top 3):			
4-Quadrant Gate Non-Traversable Medians 2 Channelized Delineators Wayside Horns 1 Closure One-Way Streets	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	3 No Treatment	

Notes:

Current Configuration:

- The crossing currently consists of one AAR track, one eastbound travel lane and one
 westbound travel lane. All approaches to the crossing are equipped with crossbucks and
 stop signs.
- A sidewalk is located on the northern side of the roadway.

- The diagnostic team identified this crossing as a possible candidate for closure due to low traffic volumes (624 vehicles per day, 2010 data). City staff described the potential closure may not be feasible as this road provides access to a significant water feature, the Argo Cascades.
- Due to narrow roadway width, channelized delineators were identified as a potential improvement option at this crossing, including 70' channelization to the west and 65' channelization to the east. The proposed improvements would qualify as SSM channelized delineators.
- The City noted they may also consider widening of the roadway to allow for the installation of non-traversable medians.

Pontiac Trail			FRA Crossing ID: 000)233W
	Crossing Improvement Options (Rank Top 3):			
	4-Quadrant Gate1 Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets	ASMe.	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	_2_ No Treatment

Notes:

Current Configuration:

- The crossing currently consists of one AAR track, one northbound travel lane and one southbound travel lane. All approaches to the crossing are equipped with crossbucks and flashing lights.
- Sidewalks are located on each side of the roadway.
- 5' bike lanes are present along Pontiac Trail in each direction

Proposed Improvements:

- There is a private driveway access immediately to the north of the crossing on the west side of the road. Due to the skew of the tracks, a standard gate mast would need to be located directly in the driveway in order to be perpendicular to the roadway. AAR noted that they may be able to locate the gate mast on the edge of the driveway and install the gate at a less than perpendicular angle.
- The proposed improvements at this crossing include installing a 60' non-traversable median to the south, and a 100' non-traversable median to the north of the crossing. The proposed medians would qualify as SSM non-traversable medians.

Bowen Street	FRA Crossing ID: 000234D				
Crossing Improvement Options (Rank Top 3):					
4-Quadrant Gate Non-Traversable Medians Channelized Delineators Wayside Horns 1 Closure One-Way Streets	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe): Treatment				

Notes:

Current Configuration:

 The crossing currently consists of one AAR track, one eastbound travel lane and one westbound travel lane. All approaches to the crossing are equipped with crossbucks and stop signs.

Proposed Improvements:

- The diagnostic team identified this crossing as a candidate for closure due to low traffic volumes (148 vehicles per day, 2010 data).
- Due to narrow roadway width, channelized delineators were identified as a potential improvement option at this crossing, including 85' channelization to the west and 50' channelization to the east. The proposed improvements would qualify as ASM reduced-length channelized delineators.

Traver Road			FRA Crossing ID: 000)235K
С	rossing Improvement Options (Rank Top 3):			
	 4-Quadrant Gate 1 Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets 	-SMSV	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	2 No Treatment

Notes:

Current Configuration:

- The crossing currently consists of one AAR track, one northbound travel lane and one southbound travel lane. All approaches to the crossing are equipped with crossbucks and flashing lights.
- A sidewalk is located on the east side of the roadway.

Proposed Improvements:

- There is a private driveway access immediately to the south of the crossing on the east side of the road. Due to the skew of the tracks, a standard gate mast would need to be located directly in the driveway in order to be perpendicular to the roadway. AAR noted that they may be able to locate the gate mast on the edge of the driveway and install the gate at a less than perpendicular angle.
- The proposed improvements to this crossing include installing a 100' non-traversable medians to the north and south of the crossing. The proposed medians would qualify as SSM non-traversable medians. Multiple private driveways would be limited to right-in/right-out turn movements.

Barton Drive			FRA Crossing ID: 000)236S
Cr	rossing Improvement Options (Rank Top 3):			
CCMG:	 4-Quadrant Gate Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets 	ASMc-	3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe):	_2No Treatment

Notes:

Current Configuration:

- The crossing currently consists of one AAR track, one eastbound travel lane and one
 westbound travel lane. The eastbound land contains a right turn lane at the intersection.
 All approaches to the crossing are equipped with crossbucks and flashing lights.
- Sidewalks are located on both sides of the roadway.

Proposed Improvements:

• The proposed improvement to this crossing includes installing a 100' non-traversable median to the west of the crossing. A median will not be possible to the east of the crossing due to the proximity of Barton Drive. The proposed median would qualify as ASM reduced-length non-traversable medians.

The following two crossings were reviewed by members of the diagnostic team. It should be noted that both crossings are owned and maintained by Great Lakes Central (GLC) Railroad. The City will coordinate crossing improvements with GLC if these crossings are included in any proposed quiet zones.

Т	raver Road		FRA Crossing ID: 000	239M	
Cro	ossing Improvement Options (Rank Top 3):				
:SMSS	4-Quadrant Gate2Non-Traversable Medians Channelized Delineators Wayside Horns Closure One-Way Streets	ASMs:	 3-Quadrant Gate Reduced Length Non-Traversable Medians Reduced Length Channelized Delineators Other (Describe): 	3 No Treatment	
No	otes:				
<u>Cı</u>	urrent Configuration:				
 The crossing currently consists of one GLC track, one eastbound travel lane and one westbound travel lane. The roadway surface is gravel. Each approach is equipped with crossbucks and stop signs. 					
Proposed Improvements:					
 The diagnostic team recommended that the City consider closure of this crossing due to relatively low traffic volumes (460 vehicles per day, 2010 data). Full-length non-traversable medians were considered as a potential improvement option 					

Dhu Varren Road FRA Crossing ID: **000240G** Crossing Improvement Options (Rank Top 3): 3-Quadrant Gate 4-Quadrant Gate Non-Traversable Medians Reduced Length Non-Traversable Medians **Channelized Delineators Reduced Length Channelized Delineators** 2 No Wayside Horns Other (Describe): Treatment Closure **One-Way Streets** Notes: **Current Configuration:** The crossing currently consists of one GLC track, one eastbound travel lane and one westbound travel lane. The crossing is equipped with all the minimum warning device requirements. **Proposed Improvements:** The proposed improvement to this crossing includes installing a 100' non-traversable

median on each crossing approach. The proposed improvements would qualify as SSM

but would require that the roadway surface be paved on each approach. The roadway

would also need to be widened to accommodate the median.

non-traversable medians.

Appendix B: Baseline Quiet Zone Risk Calculations

Create New Zone Manage Existing Zones

Log Off

Step by Step Instructions:

Step 1: To specify New Warning
Device (For Pre-Rule Quiet Zone Only)
and/or SSM, click the MODIFY Button

Step 2: Select proposed warning device or SSM. Then click the <u>UPDATE</u> button.To generate a spreadsheet of the values on this page, click on <u>ASM</u> button—This spreadsheet can then be used for ASM calculations.

Step 3: Repeat Step (2) until the SELECT button is shown at the bottom right side of this page. Note that the SELECT button is shown ONLY when the Quiet Zone Risk Index falls below the NSRT or the Risk Index with Horn.

Step 4: To save the scenario and continue, click the SELECT button

Crossing	Street	Traffic	Warning Device	Pre-SSM	SSI	M Risk	
000209V	S STATE ST	20000	Gates	0	0	11,724.60	MODIFY
000212D	E HOOVER ST	5603	Gates	0	0	6,670.50	MODIFY
000213K	HILL ST S FIFT	10100	Gates	0	0	8,496.30	MODIFY
0002145	E MADISON ST	4149	Gates	0	0	5,896.38	MODIFY
000215Y	S main st	4149	Gates	0	0	5,896.38	MODIFY
000218U	W JEFFERSON AVE	1126	Gates	0	0	3,451.68	MODIFY
000219B	ASHLEY ST	1944	Gates	0	0	3,598.31	MODIFY
000220V	WILLIAMS ST	4577	Gates	0	0	8,844.97	MODIFY
000221C	S FIRST ST	3600	Gates	0	0	5,562.58	MODIFY
000223R	W LIBERTY ST	8000	Gates	0	0	7,720.84	MODIFY
000228A	W SUMMIT ST	2783	Gates	0	0	5,004.69	MODIFY
000231H	WRIGHT ST	150	Gates	0	0	1,508.95	MODIFY
000232P	LONGSHORE ST	624	Gates	0	0	3,066.48	MODIFY
000233W	PONTIAC TRAIL	2149	Gates	0	0	5,094.87	MODIFY
000234D	BOWEN ST	148	Gates	0	0	1,243.56	MODIFY
000235K	TRAVER BLVD	670	Gates	0	0	3,157.34	MODIFY
000 <mark>236</mark> S	BARTON ST	7500	Gates	0	0	10,216.77	MODIFY
000239M	TRAVER RD	460	Gates	0	0	1,318.74	MODIFY
000240G	DHU VARREN RD	2487	Gates	0	0	8,510.34	MODIFY

* Only Public At Grade Crossings are listed.

Click for Supplementary Safety Measures [SSM]

Click for ASM spreadsheet: ASM * Note: The use of ASMs requires an application to and approval from the FRA.

Summary			
Proposed Quiet Zone:	ANN ARBOR QZ 3		
Туре:	New 24-hour QZ		
Scenario:	ANN ARBOR _53738		
Estimated Total Cost:	\$0.00		
Nationwide Significant Risk Threshold:	14723 .0 3375.7		
Risk Index with Horns:			
Quiet Zone Risk Index:	5630.75		
Select			



June 13, 2019, 3:37 PM

Contents

i.	Summary of on forum responses	2
ii.	Survey questions	3
iii.	Individual on forum responses	4

Summary Of On Forum Responses

As of June 13, 2019, 3:37 PM, this forum had: Topic Start Topic End

Attendees: 1669 February 13, 2019, 1:17 PM March 18, 2019, 2:37 PM

On Forum Responses: 697

Minutes of Public Comment: 0

QUESTION 1

After reviewing the Quiet Zone Assessment Report, please identify the below preferred option:

	%	Count
Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million	5.5%	38
Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).	8.0%	56
Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million	8.2%	57
Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation	5.5%	38
I accept the impact of train horn noise and recommend no further investment.	72.9%	508

QUESTION 2

Please provide any general input you may have or specific comments about grade crossing closures or phasing of improvements.

Answered 448

Skipped 249

Quiet Zone Assessment Survey

Survey Questions

QUESTION 1

After reviewing the Quiet Zone Assessment Report, please identify the below preferred option:

- Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost \$6.69 million
- Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost \$7.15 million (cost estimates will vary based upon crossings).
- Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million
- Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation
- I accept the impact of train horn noise and recommend no further investment.

QUESTION 2

Please provide any general input you may have or specific comments about grade crossing closures or phasing of improvements.

Quiet Zone Assessment Survey

Individual On Forum Responses

Pascale Leroueil

inside ward 5 February 13, 2019, 3:26 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Please, please, please implement a quiet zone!

Name not shown

inside ward 3 February 13, 2019, 3:31 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Danny Maier

inside ward 5 February 13, 2019, 3:31 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

The density of downtown, the number of new residents downtown, the echo between newer high raise buildings, the dramatic increase of train traffic between 10 pm and 6 am - ALL require this city to FINALLY take action. This problem is not only about quality of life for area residents, but of economic development of our downtown core. Equally important is the safety of pedestrians, cars, bikes and others - just look at the number of crossings downtown. It is unbelievable that we do not have the proper safety gates already. The City has kicked this can down the road again and again and it only gets more expensive. Please, solve this problem once and for all. Make these overdue safety improvements and

for Heaven's sake, establish a quiet zone as soon as possible.

Cesare Lorenzetti

inside ward 5 February 13, 2019, 3:35 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 13, 2019, 3:35 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The loud horn people were objecting to seems to have stopped. I have lived close to the tracks for 20 years with no problem with the exception of a short time when the train was louder than usual.

Name not shown

inside ward 5 February 13, 2019, 3:43 PM

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 5

Quiet Zone Assessment Survey

February 13, 2019, 3:45 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is not a priority with our limited budget. Not even all residents who live near the train tracks are bothered by the occasional horn blasts. The train tracks and the cars that use them have been part of our city environment for a long time and those who do not wish to experience this intermittent annoyance have been able to make other choices for many years. There are other reasons (effect on traffic especially) to oppose these moves.

Name not shown

inside ward 5 February 13, 2019, 3:46 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No strong preference between solutions but strong preference for Quiet Zone.

Winnie Ip

inside ward 5 February 13, 2019, 3:56 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I am absolutely in support of a Quiet Zone in Ann Arbor. The benefits outweigh the costs: from quality of life (disturbed sleep, noise pollution) to safety implications (with increased population - pedestrians, cars, scooters, bikes) to continued economic development in the downtown core. The cost differential between scenario 5 and scenarios 2-4 are not that great so ideally we should move forward with the safest option but I would be okay with 2-4 if we are looking for cost savings. When I look at where our tax dollars are currently being spent, I don't understand why we

cannot invest in a mere 1-2% in getting this done, and getting it done right. It's a one-time investment that will have an ongoing positive impact to our city and the ongoing maintenance costs are low. PLEASE PLEASE PLEASE PLEASE get this done!

Name not shown

inside ward 1 February 13, 2019, 3:56 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 13, 2019, 3:58 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Please: let's not spend these considerable sums for a problem that isn't really a problem. People living near the rail tracks made that choice after the tracks were there. Catering to their inappropriately influential complaints in this regard is a waste, and unfair to the larger citizenry.

If you'd save money on projects like this, you could spend more of city funds on infrastructure improvements we all know are necessary, without having to, say, increase water rates so much. We can all live with the status quo on this one! The "safety" factor is a ruse.

Name not shown

inside ward 4 February 13, 2019, 4:06 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Quiet Zone Assessment Survey

I prefer scenario 5 or scenario 4, but honestly as long as precautionary measures are taken so people know the train is coming and the train doesn't blare it's horn at all hours of the day and night (especially the night time) - I'm okay with any resolution.

Patti Maki

inside ward 5 February 13, 2019, 4:22 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Please no tax dollars to appease a vocal minority. I love the trains. They're part of life. People moved where train horns sound, and they can move where they don't.

Name not shown

inside ward 1 February 13, 2019, 4:26 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No changes are necessary. I live less than a block from the tracks. The noise is not a problem.

John Hall

inside ward 5 February 13, 2019, 4:28 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I think that the proposed changes for Ashley street are showing the street as a two way. It is a N one way.

Name not shown

inside ward 1 February 13, 2019, 4:29 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Quiet zone is definitely important. A lot of people are posting here that they believe that the train noise has been constant, when in fact the city's own study showed that there has been at least a 3x increase in the last 5 years--this is not something that people consented to by moving into the area, it's something that has changed during the time many have lived there.

Noise has been shown in many peer-reviewed scientific studies to have a negative impact on human health, and Ann Arbor residents have the right to have their public health not actively infringed on by late night trains-therefore, I believe that all crossings should be made into quiet crossings.

That said, I realize not everyone will agree that this expense is worthwhile. If we need to pick and choose which crossings to convert to quiet crossings, it's important to consider the residential density near crossings. For example, rural crossings, or those in lower density residential areas have a relatively smaller negative impact on public health, while those in high density housing areas (eg West Liberty, South Main) have a disproportionately high negative impact.

This means that if we are only going to alter a few (though I believe we should alter them all), we will get more bang for our buck, in terms of improving public health, if we focus on crossings near high residential housing areas.

Ian Ogden

inside ward 5 February 13, 2019, 4:46 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I've lived in a shared house at the corner of S 1st and William Street and, in addition to my own residence, have seen approximatly 20 housemates come and go since 2013. None have reported any concerns about train

Quiet Zone Assessment Survey

noise and I am personally in no way bothered by the sounding of the horn.

I am very concerned about the energy and city funding being considered for allocation toward this project. This quality-of-life project only has the potential to further raise property values and rental rates in the vicinity of the rail line (including my current home). In terms of the economics of the city at large, this feels the wrong time to consider putting millions of dollars toward a project like this when the city has recently lost a significant source of funding to combat high-and-rising housing costs to both renters and owners--the claimed contribution to the city's affordable housing fund as a result of the now-cancelled Core Spaces development. As a renter and prospective homeowner, I see no realistic relief from high rental costs and prohibitively high property values, and this will only amplify the problem--materially for those in the vicinity of the line and culturally for the city at large.

I would encourage the city to consider the costs of the feasibility and engineering studies to be sunk, and shift any funds for crossing upgrades to the affordable housing fund.

Thanks for reading.

Kitty Kahn

inside ward 5 February 13, 2019, 4:59 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We live two blocks from the RR tracks and we hear the train horns and enjoy the sound. We would miss it and we hope the City doesn't do anything to stop it.

Name not shown

inside ward 4 February 13, 2019, 5:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is ridiculous, buy some earplugs. No tax dollars!!

Name not shown

inside ward 5 February 13, 2019, 5:09 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Please make these improvements as soon as possible. We need a quiet zone for my kids who wake up every time the horn sounds. It is terrifying. I also worry about safety and more people living right along the tracks.

I know we all worry about funds, but nothing is more important than safety. Please Chip, get this done for us!

Name not shown

inside ward 3 February 13, 2019, 5:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Trains have been going thru town for a LONG time. When you build an apartment building right next to the train track, you get what you deserve. Horns.

chuck blackmer

inside ward 2 February 13, 2019, 5:19 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I can not believe this got this far. Chuck

Martha Brown

inside ward 5

Quiet Zone Assessment Survey

February 13, 2019, 5:20 PM

Question 1

• Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 4 February 13, 2019, 6:13 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There are so many issues that the City has to address, including road repairs, security needs, affordable housing, etc., all which require significant financial investments, that I strongly do not believe that any investment of time or funds in this matter is warranted. Thank you for your cooperation in this matter.

Name not shown

inside ward 5 February 13, 2019, 6:24 PM

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

With the population density growing around the southern sites, it is especially important to upgrade the safety of those sites and improve the living experience with a quite zone for trains - those whistles are really loud!

Name not shown

outside wards February 13, 2019, 6:44 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I like the train sounds, makes the city, feel and sound like it should.

Name not shown

inside ward 5 February 13, 2019, 7:13 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Name not shown

inside ward 4 February 13, 2019, 7:16 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

I live in Ann Arbor where I frequently cross many of these crossings (via car). I also occasionally hear train whistles from my home, but I'm not really close enough where it's intrusive. The cost estimates are pretty expensive, in my opinion. I'm not doubting them if anything, I would guess they might actually cost more. It just doesn't seem like a good option to spend this much money for something that doesn't seem like such a big problem to me. I may feel differently if I lived closer to any of these crossings and experienced noise more frequently. I certainly wouldn't want a solution that involves closing any of the crossings.

Name not shown

inside ward 5 February 13, 2019, 7:32 PM

Question 1

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I do live near the train tracks and hear the trains, but think there are far more important things for the city to spend money on

Matt Tucker

inside ward 5 February 13, 2019, 7:54 PM

Question 1

 Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

Personally, I think the phased implementation, starting on the south side of town, is both prudent and high-impact. One thing to note is that the analysis of the Ashley St. crossing seems to suggest that it is a two-way street when it is in fact a one-way street at that point. I'm not sure if that changes the cost/options there or not.

Name not shown

inside ward 5 February 13, 2019, 8:03 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

inside ward 5 February 13, 2019, 8:27 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

inside ward 5 February 13, 2019, 8:28 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

The train horn noise is HORRIBLE. I support anything that eliminates it.

Name not shown

inside ward 3 February 13, 2019, 8:29 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Kent Jocque

inside ward 5 February 13, 2019, 8:41 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 13, 2019, 8:52 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

No response

George Hammond

inside ward 5 February 13, 2019, 9:09 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Laura Eliason

inside ward 1 February 13, 2019, 9:10 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

This has only been raised as an issue after the tracks have been in the same place for years. There are houses all around the train tracks that have been there for decades and no sound complaints have been made/or taken seriously. Now, there are people moving into new expensive condos adjacent to the tracks, those with higher incomes, who feel entitled to quiet zones. If they would like to pay for the costs to upgrade out of pocket that makes sense. They could raise the money as a community or neighborhood association. I also think it is a safety issue to have quiet trains. Think of bikers crossing tracks, pedestrians cross the tracks at many points, public transit, etc. The city budget should be used to do the most good for the most citizens. Right now water and road upgrades, assisting those struggling to find housing, and school children seem more in need of those \$2.5M-\$8M.

Name not shown

inside ward 5 February 13, 2019, 9:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

It seems to me that we have a very vocal minority in play with regard to this train noise.

Elmer Martinez

inside ward 1 February 13, 2019, 9:17 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 3 February 13, 2019, 9:24 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

inside ward 1 February 13, 2019, 9:36 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

It is ridiculous to spend millions of dollars to solve a problem that can be solved for free by simply instructing the train drivers to not lay on the horn between 9 pm and 7 am. I fully understand that there is a legal and safe protocol for how often they must sound the horn and how loud it

Quiet Zone Assessment Survey

must be, but there is also a range for loudness within that protocol. Drivers should be instructed that unless there is some compelling reason, for instance a person, car or an animal on the tracks, they should not blow the horn above the minimum loudness required during nighttime hours in the midst of residential neighborhoods.

Helga Haller

inside ward 5 February 13, 2019, 9:37 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Dianne Brainard

inside ward 4 February 13, 2019, 9:59 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

There are other more pressing expense priorities e.g. roads, water systems infrastructure and affordable housing. I lived next door to rail road track for 17 years and the noise fades into the background once you get use to it.

Name not shown

inside ward 3 February 13, 2019, 10:26 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

David Rosenberg

inside ward 1 February 13, 2019, 10:44 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Janice Sigler

inside ward 5 February 14, 2019, 12:28 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

Please no horns at crossings under any circumstance. Prefer train horns to crossing horns.

Name not shown

inside ward 1 February 14, 2019, 1:12 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Absolutely irresponsible to spend a dime on this inconvenience for a handful of people while a single pot hole exists in Ann Arbor. Beyond that, the idea that it would even be an option to close a road, especially one like Ashley and Jefferson that does a lot to alleviate Main street traffic, is beyond shocking. Did anyone who lives in these homes not understand there would be an occasional train when they moved in? Furthermore, it is not the transcontinental railroad, it is a short, once or twice a night train.

Name not shown

inside ward 3 February 14, 2019, 1:35 AM

Quiet Zone Assessment Survey

Question 1

 I accept the impact of train horn noise and recommend no further investment. law limiting the number of night trains? Regardless, \$7M+ is a lot of money for a quiet zone. I believe the city has other more pressing priorities.

Question 2

No response

Name not shown

outside wards February 14, 2019, 7:14 AM

Name not shown

inside ward 3 February 14, 2019, 3:08 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Question 2

I love hearing the train at night.

Name not shown

inside ward 1 February 14, 2019, 7:23 AM

Name not shown

inside ward 5 February 14, 2019, 5:59 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Quiet zones should absolutely not be a priority. I live near the tracks and do not find the noise to be an issue. Ear plugs would be an effective solution for those sensative to the noise.

There have not been any train/car accidents in Ann Arbor with the current configuration therefore it's difficult to justify this as a safety concern.

Ann Arbor's crosswalks are a far more pressing safety and public welfare issue.

Question 2

No response

Robert Thomas

inside ward 5 February 14, 2019, 6:26 AM

 I accept the impact of train horn noise and recommend no further investment.

Maureen Weinhold

inside ward 5 February 14, 2019, 7:29 AM

Question 2

Question 1

I don't recall reading about anyone getting injured or killed so I question the need for improvements from a safety perspective. Can the city pass a

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Railroad crossing gates are safest for pedestrian/cars and provide least

Quiet Zone Assessment Survey

noise to surrounding neighborhoods.

Tom Stulberg

inside ward 1 February 14, 2019, 7:38 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live immediately adjacent to an at grade crossing. It's fine. Sure it's loud, but you get used to it. We sleep through the horn at night.

Name not shown

inside ward 5 February 14, 2019, 8:09 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

How much will Fingerle Lumber's closing affect train traffic? Were they still receiving regular rail shipments? What businesses still receive rail shipments? Is the train traffic though Ann Arbor on the decline?

Name not shown

inside ward 5 February 14, 2019, 8:48 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I have lived in Ann Arbor for over 20 years. Throughout this time I have primarily resided within a few blocks of the train. The train horns are not and have never been bothersome to me or my small children. Prior to a small minority of citizens in Ann Arbor speaking up about the train horns this has never been an issue. The money that would be spent on this would be much better utilized in so many other areas of the city. Perhaps

it would be cheaper still to provide some kind of sound baffling for citizens complaining of noise.

Name not shown

inside ward 1 February 14, 2019, 8:55 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I have lived in my house for over 35 years in the north side area impacted by all the train crossings from Barton through Wright Street. I like the trains and don't mind the noise; it is part of living in an urban area. Those moving into the area should take that into consideration when purchasing a house.

Name not shown

inside ward 5 February 14, 2019, 8:56 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live a few blocks from the RR tracks, on the Old West Side. We hear the trains, especially in summer when our windows are open, but soon got used to them. We awaken momentarily then go back to sleep. While I sympathize with those who have a more difficult time resuming their sleep, I feel the city has much higher priorities for spending its limited revenues, for example climate change mitigation, pedestrian safety, planting and maintaining trees.

Name not shown

inside ward 2 February 14, 2019, 8:56 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Quiet Zone Assessment Survey

Question 2

We previously rented a house on the Northside near Argo and the train tracks. It was so awful the continuous nighttime noise that after less than a month in the house, we had to terminate our lease and move our family of 4 including 2 young children further south to a location further from the incredibly loud train noise multiple times a week at 1230, 130, and 330 am. The nose is awful and leads to lost sleep, stress, loss of productivity, physical problems. Every other major city has a quiet zone. The train situation here is a mess. It absolutely has to be dealt with.

Name not shown

inside ward 5 February 14, 2019, 8:57 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live very near the train tracts there are a number of alternatives, sound machines, fans, ear plugs that residents can use. There's absolutely no reason for the city to invest millions of dollars into this. Fix the roads.

Deb VandenBroek

inside ward 5 February 14, 2019, 9:12 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Trains have been on these tracks forever and if you purchase a home in the vicinity, it comes with the territory. Use the horns as a meditative focus...breathe and focus on something which will really improve the lives of others. Think of what \$2-7 M could do to house those who experience chronic homelessness? Give the monies to Avalon/Ann Arbor Housing Commission. Thank you for asking

Name not shown

inside ward 5 February 14, 2019, 9:23 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 14, 2019, 9:25 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

Anyone who moved next to the train tracks knew they were moving next to the train tracks. this is all about the wealthier people buying new condos near the tracks and now they don't want to hear the trains. More people have been killed in our so called "safe" crosswalks than on the train tracks. The chunks of cement kicked up every time someone drives down my street our more dangerous. Drive down Tudor today and see for yourselves

Name not shown

inside ward 5 February 14, 2019, 9:26 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 14, 2019, 9:33 AM

Question 1

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live in close proximity to 2 of the crossing and do not feel that elimination of the horn noise justifies the expense. My experience is that the noise/rumble created by the train itself is more noticeable than the horn.

Name not shown

inside ward 4 February 14, 2019, 9:40 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 3 February 14, 2019, 9:44 AM

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 9:46 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Barb Harburg

inside ward 5 February 14, 2019, 9:46 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 9:54 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Rosie Pahl Donaldson

inside ward 1 February 14, 2019, 10:33 AM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I live 700ft from the Barton Road crossing. While I definitely still notice the horn every time it goes, it no longer bothers me or wakes me up if I am asleep. I recognize, however, that other people are more sensitive to the mental/physiological impacts of noise than I. As Ann Arbor is forced to become more dense, it might also be easier to encourage development immediately around the railroad if people don't think they will be impacted by as much railroad noise. I recommend a phased implementation to test if expected improvements (of well-being, or whatever other data the planners are interested in) actually happen as a result of the changes--and thus to determine if another phase is even necessary.

Quiet Zone Assessment Survey

Name not shown

inside ward 4 February 14, 2019, 10:36 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I've lived near the train tracks for years. You very quickly get used to the noise. Also, if you are deciding to live near tracks, you should know what to expect. We all know what trains sounds like.

Name not shown

inside ward 4 February 14, 2019, 10:54 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 14, 2019, 11:15 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Our house is under 800' from the Ann Arbor Railroad tracks. We hear the train but don't find it disruptive to the tune of asking fellow residents to chip in millions.

Name not shown

inside ward 5 February 14, 2019, 11:26 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Bret Hautamaki

inside ward 4 February 14, 2019, 11:29 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

The train horns are extremely loud and frankly, I don't care which Scenario is implemented, I just want the train horns to please stop from waking my family up multiple nights per week! This is a quality of life issue for thousands of residents!

Name not shown

inside ward 5 February 14, 2019, 11:31 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Train horns are safety features. If money is to be spent on a project involving the railroad, perhaps we can focus on pedestrian crossing safety at specific sites. Rather than creating bizarre and ineffective barricades increasing pedestrian risk, let's look at safe pedestrian crossings at popular crossing sites (please note that this is to IMPROVE crossing access, not eliminate crossing in locations that are clear connections to a contiguous area). Train horns are safety features. I have more safety concerns about silencing the train horns than I have regarding the noise.

Name not shown

inside ward 2 February 14, 2019, 11:40 AM

Quiet Zone Assessment Survey

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Total waste of time and money, cost is far too high for the benefits gained.

Name not shown

inside ward 5 February 14, 2019, 11:41 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is a ridiculous amount of money to even consider spending when we are in need of police/fire rescue, our roads are still in disrepair, and our water treatment facility is insufficient for our growing population and threats from Dioxane, PFAS/PFOS, etc.

Brian Cook

inside ward 3 February 14, 2019, 11:55 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 12:08 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We live in a city. Trains exist. These two facts co-exist harmoniously.... The end. I am more than slightly appalled that we would spend any money on even STUDYING this issue when we have so many more urgent and important issues like **affordable housing** that need to be addressed. It seems like a solution in search of a problem to me. Stuff like this is what gives us Ann Arborites a snowflake reputation. (Seriously... train noise?? I honestly thought this whole concept was an Onion article at first.) Move on.

Name not shown

inside ward 5 February 14, 2019, 12:11 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Ryan Harrington

inside ward 5 February 14, 2019, 12:12 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I currently live far enough away that I rarely ever hear the train noise, but I previously lived about three blocks from the tracks and could hear them often. I never found the noise to be particularly disruptive and would strongly prefer this amount of money to be put towards other services such as affordable housing or other assistance for our neighbors in need.

Name not shown

inside ward 1 February 14, 2019, 12:15 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

I do not feel that this is a reasonable expense to be borne by the taxpayers of Ann Arbor. If there is no history of safety problems I do not think this costly change is necessary.

Mike Mazor

inside ward 5 February 14, 2019, 12:36 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There are not enough trains per day to warrant changing the grade crossings.

Name not shown

inside ward 5 February 14, 2019, 12:37 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 5

February 14, 2019, 12:39 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I find it rather silly that this is even being seriously considered. Please don't waste the budget on such a frivolous expense

Virginia Hannon

inside ward 5 February 14, 2019, 12:55 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Lived here for 30 yrs... NEVER been bothered by it.

Name not shown

inside ward 4 February 14, 2019, 12:56 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1

February 14, 2019, 12:58 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

Please make sure to include gates for pedestrians as well as cars.

Name not shown

inside ward 5

February 14, 2019, 1:01 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

No response

Name not shown

inside ward 1 February 14, 2019, 1:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 1:04 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

To be quite honest, I find the sound of the train horn very calming. It reminds me of when I was a child, and when I hear it at night, it always gives me a frisson of nostalgia. The trains are rather infrequent and I just don't see this as a major issue. Cities are noisy, point blank. Car noise is way more disruptive to me than trains and I don't see anyone complaining or taking steps to reduce car use and noise.

Name not shown

inside ward 5 February 14, 2019, 1:06 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

inside ward 4 February 14, 2019, 1:15 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Other than maintaining safe crossings, I don't see any need to create Quiet Zones. I live in Lower Burns Park and love the trains.

Rhonda McCammon

outside wards February 14, 2019, 1:18 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 1:19 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 2 February 14, 2019, 1:25 PM

Question 1

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment. I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 1:25 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I love the sound of the trains. For several years I lived next to the tracks near multiple crossings. It wasn't great to be woken up almost every night but it's an important sound in our community. Thank you for doing the assessment but unless trains are coming north and south multiple times every day please do not spend money to stop the noise. The only way I would support this is through a special assessment to those within an 1/8th of a mile. If those that close vote to pay for it then let them pay for it. This would go against equity goals and the money should be saved

Question 2

- (1) Why is there no option that includes closures? This biases your results
- (2) Phased implementation (6 and 7) seems unnecessary -- the cost now is the same as Scenarios 2-4, and it likely will increase by the time we get to phase 2.
- (3) Have you considered instead the selective purchase of residences that are most impacted by the noise? It may be cheaper and the land could be used for recreational or commercial purposes.

Jennifer Fike

inside ward 1 February 14, 2019, 1:41 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

inside ward 1

Greta anderson-finn

February 14, 2019, 1:53 PM

Name not shown

inside ward 5 February 14, 2019, 1:30 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Certainly there a more pressing projects these millions of dollars could go toward.

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 14, 2019, 1:31 PM

Question 1

Jamie Morris

inside ward 5 February 14, 2019, 2:04 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

Perhaps the new downtown residents could invest in a pair of earplugs? We need to spend tax money on safe water, streets without potholes, fire and police services, parks etc.

Name not shown

inside ward 5 February 14, 2019, 2:05 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Please stop entertaining the thoughts and ideas of extreme minorities in this town. This is absolutely ridiculous, and it's already appalling that money was wasted on this assessment in the first place.

Lindsay Forbes

inside ward 5 February 14, 2019, 2:06 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The members of our household actually like hearing the train horns.

Name not shown

inside ward 4 February 14, 2019, 2:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Train noise is a regular and predictable byproduct of living near train tracks. Those who don't want to experience train noise have a wide range

of real estate options within and outside the city. An appropriate level of investment to mitigate train noise is \$0.

Freeway noise is much more pervasive source of sound pollution in Ann Arbor than rail noise. Unlike the trains, the din of the freeway is constant, and unlike the train noise which affects only a small (but wealthy and vocal) subset of residents, our encircling highways can be heard from nearly every neighborhood outside of downtown. Many other cities included sound barriers with their freeway design, and if Ann Arbor was looking to make a multimillion dollar investment to reduce noise pollution, that would be a much more impactful one.

Name not shown

inside ward 5 February 14, 2019, 2:20 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 14, 2019, 2:30 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Name not shown

inside ward 1 February 14, 2019, 2:54 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Quiet Zone Assessment Survey

The train track is right behind my home at 1308 Traver and when the trains are heading towards Bowen Street they start sounding the horns as they reach my house. I have lived here since 1984 and this has never bothered me. Now and then there is a driver who is very loud but not often. I usually do not notice it at all. The thing I don't like is when a train is clearly going too fast and when this occurs my house does shake. I only feel that on the second floor. The house has been here since 1860 but if all the trains went faster than intended (and this is always the train that passes early in the morning -- 3 AM or a little later) it might have a negative input on the structure of the home.

Name not shown

inside ward 4 February 14, 2019, 3:23 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Michael Taylor

inside ward 4 February 14, 2019, 3:41 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The train was here before anybody bought their house close to it, they knew it was a feature of the neighborhood, like it or not.

Name not shown

inside ward 3 February 14, 2019, 3:44 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 14, 2019, 3:48 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Ouestion 2

Create grade crossing at the bridge in the Arboretum

Name not shown

inside ward 4 February 14, 2019, 3:49 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

come on, this money could go towards way better things, like fixing roads, or towards low-income housing. this is a waste of time and taxpayer dollars.

Name not shown

inside ward 4 February 14, 2019, 3:51 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

As a university student, I find it very difficult to sleep when I hear the train horns blast at incredibly loud sounds around my nearby apartment. I think it is necessary, for the wellbeing of the citizens of Ann Arbor, that the city takes whatever costs to upgrade the gates and signals, in order to limit the horn sounds from disrupting everyone's sleep and lives. The benefits to the community completely outweigh any fiscal costs involved in improving the train horn noise and safety regarding the train signals.

Quiet Zone Assessment Survey

Name not shown

inside ward 4

February 14, 2019, 3:51 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 4

February 14, 2019, 3:54 PM

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 4

February 14, 2019, 4:00 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5

February 14, 2019, 4:07 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If you live near a train track you will hear trains.

Name not shown

inside ward 1

February 14, 2019, 4:08 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4

February 14, 2019, 4:09 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

I want the noise to stop as quickly as possible.

Amy Klinke

inside ward 5

February 14, 2019, 4:12 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4

February 14, 2019, 4:12 PM

Quiet Zone Assessment Survey

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I am delighted that the city has undertaken an effort to reduce the train noise. I live about 8 blocks from the State Street crossing. The train horns often wake me at times ranging from 2 am to 5 am. This is very disturbing. I am interested to know more about the AA Railway; what is its function?

I encourage you to pursue the funds to make this happen, the very loud noise of these train horns does not belong in a city setting with dense housing.

Name not shown

inside ward 3 February 14, 2019, 4:14 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Name not shown

inside ward 4 February 14, 2019, 4:51 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

William Ingram

inside ward 4

February 14, 2019, 4:53 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Trains are required to sound their horns -- two longs, a short, and a long -- and this is reasonable. The whole sequence shouldn't take more than ten seconds.

The problem is that the engineers on the trains in question hold their hand down on the horn for an unreasonable amount of time, resulting in four very very long sounds, up to a minute in many cases. If they could be instructed to give short blasts rather than very long ones, much of the problem would disappear I believe.

Name not shown

inside ward 4

February 14, 2019, 5:11 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 4

February 14, 2019, 5:23 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

- Horn duration is already substandard to NTSB requirements, I believe.
- As I'm told concerning the intrusions of uom athletics: if-you-don't like-it-move...and certainly, do not build high density housing at or near the RR.

Michael Blischke

inside ward 1

February 14, 2019, 5:51 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

I live 1/4 mile from the train tracks, and the train whistle is not a problem at all. This will only benefit homeowners and other residential property owners who live within 500 or so feet of the train tracks. Those owners knew the tracks were there when they made their purchase, and the rest of Ann Arbor shouldn't be paying to increase their property value. They will get their money back in increased property value when they sell their property. Commercial properties, even ones right next to the tracks, are not going to see any benefit and should be exempt from any added cost.

If this is to be implemented, there need to be Quiet Zone districts encompassing only residential properties within 500 or 1000 feet of the tracks. Those properties ONLY should be assessed for the full cost of implementation, and for added ongoing maintenance costs, since they are the only ones to benefit from this. An additional fee could be assessed when non-residential properties are converted to residential at the time of rezoning. If the property owners close to the tracks don't find the cost to be worthwhile, then spreading the cost over more properties won't make it worthwhile, since including those properties won't increase the benefit to Ann Arbor as a whole.

Name not shown

inside ward 4 February 14, 2019, 6:08 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 1 February 14, 2019, 6:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

When one moves into a neighborhood, one is aware of occasional noice from train horns. That's part of the reason certain homes cost less. For the residents of homes bothered by the train noise, there are a number of cost effective measures those individual residents can take to make a

very substantial difference in the train noise at their residence.

Name not shown

inside ward 3 February 14, 2019, 6:41 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Ouestion 2

Quite honestly, people living in the neighborhoods around the crossings chose to buy or rent property in that area. I don't believe it's fair for everyone else in the city to shoulder the expense of making these changes that only benefit them.

Name not shown

inside ward 4 February 14, 2019, 6:51 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

Instead of the horn, just please install gates whenever the train goes by an intersection. I wake up every single night to the train, and installing gates would be both safer and accommodate the needs of Ann Arbor residents. Thank you

Tingxuan Zhang

inside ward 4 February 14, 2019, 6:53 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

Quiet Zone Assessment Survey

inside ward 4 February 14, 2019, 7:13 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 4 February 14, 2019, 7:20 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I think the system as it exists now works just fine and that there is no need for improvements. I like to hear the sound of the train whistles and alerts. Now granted I live a little ways away from the train tracks but that was something I chose to do just as people who live closer to the train tracks have chosen their location knowing that the trains are there and come through regularly.

Gina Lorenzetti

inside ward 5 February 14, 2019, 7:35 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The city could provide ear plugs or noise canceling headphones to any and all residents that feel the train they knowingly moved near is too loud. I see this as much more cost effective measure.

Name not shown

inside ward 3 February 14, 2019, 7:37 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

Don't buy a house near a train if the noise bothers you.

Nancy Leff

inside ward 4 February 14, 2019, 7:46 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I love the sound of train horns. What is truly a noise hazard are all the businesses and restaurants that pipe hideous loud music out onto the streets. If you really want to do something about noise pollution, start here. We are assualted day and night by loud insipid music that blares from gas station pumps, grocery store, everyplace you go until you can't even hear yourself think. Train horns are few and intermittent. How about stopping UM sports facilities' music from assaulting our neighborhood (I am in lower Burns Park) - it rattles the windows in our honmes. This whole idea of noise abatement for train horns seems ridiculous. How much money have you wasted on this study?

Name not shown

inside ward 4 February 14, 2019, 7:53 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 4 February 14, 2019, 7:57 PM

Quiet Zone Assessment Survey

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There are so few trains moving through town that the occasional horn blowing is not a problem. Noise from the loudspeakers of the UM sports complex is a much bigger problem in my neighborhood.

Name not shown

inside ward 4 February 14, 2019, 8:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 8:27 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 4 February 14, 2019, 8:36 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

Costs are very high for what I consider an occasional nuisance. Can train travel through town be restricted to normal times to avoid disrupting during sleep/quiet times, for example 7am-10pm, only.

Name not shown

inside ward 4 February 14, 2019, 8:49 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 8:49 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 14, 2019, 8:59 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Instead of spending millions of dollars to attempt to sway the railroad to change their safety protocols, the city should force landlords and developers to disclose how close their buildings are to railroad crossings. It is not reasonable for city residents to bear the cost of changing crossings when they were present before the residents who are now complaining.

Quiet Zone Assessment Survey

Rudolf Wortmann

inside ward 5 February 14, 2019, 9:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Paula Rexer

inside ward 1 February 14, 2019, 9:07 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 9:08 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

It seems that the train horns got louder or more frequent during the summer of 2018. I would like to have this plan help in my neighborhood.

Name not shown

inside ward 1 February 14, 2019, 9:35 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live close enough to the tracks to hear the horns. They are not bothersome. Road noise is a much bigger issue and some of the proposed closures will only worsen that in my neighborhood. In general, infrequent intermittent noise should not be a justification for spending millions of dollars. If we really are going to consider risk as a factor for identifying necessary infrastructure upgrades we should focus on safety for pedestrians and cyclists. This money is needed for traffic calming measures. I feel safer crossing the train tracks near my house than I feel walking across my street at a nearby crosswalk. That crosswalk has a flashing yellow light and is next to a park and a school, and it's still not safe. Drivers are creating risk, not trains.

Name not shown

inside ward 4 February 14, 2019, 9:40 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 14, 2019, 10:01 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I live in an apartment where the railroad track is right by the building... would be great for me and future residents to enjoy a peaceful quiet time (at least at night when we are mostly sleeping)

Name not shown

inside ward 4 February 14, 2019, 10:11 PM

Quiet Zone Assessment Survey

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 14, 2019, 10:47 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 14, 2019, 10:56 PM

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

David Brusstar

inside ward 4

February 14, 2019, 11:00 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This seems like a costly intervention just to mitigate occasional and localized noise.

Name not shown

inside ward 5 February 14, 2019, 11:43 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Rachel Becker

inside ward 4 February 14, 2019, 11:48 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Joseph Papin

inside ward 4

February 14, 2019, 11:49 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 4

February 14, 2019, 11:54 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Quiet Zone Assessment Survey

Question 2

No response

Elliot Gertel

inside ward 5 February 15, 2019, 12:37 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

This is a frivolous waste of money in a time of budgetary restraints and where funds are needed for far more important matters such as long-term repairs to our very poor and continuously deteriorating roads. This plan to waste millions of taxpayer funds to benefit a few very wealthy while doing nothing for the majority of Ann Arbor's residents is a foolish idea to say the very least. It needs to be nipped in the bud with no further research, consultation, or expenditures.

Name not shown

inside ward 4 February 15, 2019, 3:04 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 6:51 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

For options 1, 2, 3, 4 we're going to be spending about 7 millions anyway; whatever it costs more to get to scenario 5 is really just pennies on the

dollar. Might as well get the most effective solution.

Jacqueline Caserio

inside ward 4 February 15, 2019, 7:35 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

The train wakes up 2-3 times per night. It's very unfortunate, especially when I have to wake up early. When I took the LSAT, I was very nervous the night before. I finally fell asleep only to have the train wake me up two times. This is annoying and not okay

Mary Hartman

inside ward 1 February 15, 2019, 8:06 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live in Traver Ridge apartments (the ones about 1 block from the train tracks, next to Stapp Nature Area) and spend a great deal of time in and around Barton Drive. The train noise doesn't bother me or my family at all and I've never heard any other residents complain who live in this neighborhood. There are so few trains and it may be because of the buffers of woods around us, but the noise doesn't seem to be a problem at all. I actually enjoy the sound of the trains and I think it adds to the charm of the city. If some residents in town have complaints with the duration of whistles, etc. that matter should be taken up with the train company to keep their sound limited and their conductors less adamant about making noise, which would be much easier and cheaper than creating new gates, signals, etc.

Christine Brummer

inside ward 5 February 15, 2019, 8:09 AM

Question 1

Quiet Zone Assessment Survey

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

This scenario provides enhanced safety features with little to no disruption of residential neighborhoods including problematic medians.

Name not shown

inside ward 5 February 15, 2019, 8:28 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There are not that many trains per day plus trains mean commerce. This is an overstated problem with big dollar fixes and there are more pressing problems that could benefit from these millions.

Name not shown

inside ward 5 February 15, 2019, 8:52 AM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4

February 15, 2019, 8:56 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 8:58 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I believe that instead of spending millions of dollars on train noises, Ann Arbor should focus on affordable housing.

Name not shown

inside ward 4 February 15, 2019, 9:17 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 9:23 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 9:29 AM

Question 1

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Those who live near the railroad crossings are abundantly aware of their presence when they moved there.

Wendy Barrie

inside ward 1 February 15, 2019, 9:42 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There are far more important and life impacting areas we ought to address. Affordable housing, etc.

Remember when, about 20 years ago we had the RR remove all the gates? A "quiet zone" is an unnecessary expense that many people feel would remove some of the charm of the neighborhoods i.e. train horns.

Name not shown

inside ward 2

February 15, 2019, 9:43 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I have no objection to train horns and my home is close enough to the tracks that we hear them many times, even late at night and early in the morning.

Name not shown

inside ward 2 February 15, 2019, 9:46 AM

Ouestion 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

People who buy homes next to railroad tracks can expect train noise, including train horns. The tracks have been there a lot longer than the housing.

Robert Klingsten

inside ward 2 February 15, 2019, 9:47 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Spend the money on more important stuff. I am amazed this is considered an issue.

Name not shown

inside ward 4 February 15, 2019, 9:50 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Those who have chosen to live near train tracks should expect to hear the sounds of a train. The money required for this could be used for so many more useful things, other than to appease people who should have taken the surroundings of a house into consideration before moving in.

Name not shown

inside ward 5 February 15, 2019, 9:51 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Quiet Zone Assessment Survey

Name not shown

inside ward 2 February 15, 2019, 9:54 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The train tracks are not a new addition to the city. To buy or build near the tracks brings with it the additional noise that comes with train traffic. If you don't want the noise don't live near the tracks. This is not burden taxpayers should have to assume.

Name not shown

inside ward 4 February 15, 2019, 9:58 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Perhaps the number of times they honk could change, does it really need to blare 3-4 times? I'm not sure if I'm hearing it multiple times because of the proximity of crossings, but it does seem that some regulation or preference on the driver's part, causes there to be 3-4 honks in one crossing.

This money could be better allocated for other town concerns, such as long term solutions for the quality of our streets.

Jason Colman

inside ward 4 February 15, 2019, 10:05 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This does not seem like a good value for city tax dollars, especially since the train noise has been present for many years and is not new or unexpected to homeowners in the affected area.

Name not shown

inside ward 5 February 15, 2019, 10:15 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If you buy next to the tracks you better be ready to accept the noise. I support \$0 to reduce/eliminate the noise.

Ross Zoet

inside ward 1 February 15, 2019, 10:18 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Please invest in fixing the roads. They are truly embarrassing and frankly a safety hazard. Train noise comes with living near a railroad. How many times does the public have to plead to fix the roads?!

Griffin Miller

inside ward 4 February 15, 2019, 10:20 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

The cost of signals you listed is ABUSIVE. Who is selling these things at such an exorbitant price?? That's the issue here. If we remove the horn, we need more lights along the rails and signals for incoming trains, and a Fat headlight on the front of the train. For 19 intersections, I don't see how that is almost \$8,000,000... Anyway, great analysis of safety risks:) hopefully we can find a better supplier though.

Name not shown

inside ward 4

Quiet Zone Assessment Survey

February 15, 2019, 10:20 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 10:22 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1

February 15, 2019, 10:22 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We live near the trains in NE A2, and love the noise. If you dont want the noise, you shouldn't have bought a house/condo by the tracks! How obvious is that??? There are so so so many issues in this city that could use the money for something sane, and helpful for persons w/ actual real needs; we DONT want to pay for arrogant privileges for "sensitive" but rich "citizens!"

Peter Hochgraf

inside ward 3 February 15, 2019, 10:36 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Spending this money will not eliminate train horns from the area. If you live near train tracks, one should expect there to be train sounds at all hours.

Jonathan Happ

inside ward 4

February 15, 2019, 10:37 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is a terrible waste of taxpayer money.

Name not shown

inside ward 2

February 15, 2019, 10:39 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1

February 15, 2019, 10:39 AM

Question 1

 Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Quiet Zone Assessment Survey

Name not shown

inside ward 4 February 15, 2019, 10:40 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 10:40 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

There needs to be a safety measure for the pedestrian and vehicles. The sound of the horn is insufficient because now there are pedestrians with headphones on, which could hinder their attention to sound. Also, the sound resonates in the apartment complex which is not only bothersome, but also shaking things within the units.

Jennie Allan

inside ward 1 February 15, 2019, 10:47 AM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I am honestly happy with any of the scenarios and appreciate the efforts that are being made to implement a quiet zone while still attending to safety. Many thanks!!

Name not shown

inside ward 5 February 15, 2019, 10:47 AM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Judith Hanway

inside ward 4 February 15, 2019, 11:06 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live close enough to train crossings to hear the train horns every day (and night). The level of sound varies with the time of year and weather. I enjoy hearing the trains. When I have chosen to live in a certain area, I have taken the time to investigate the neighborhood (parks, traffic, schools, access to bus stops, access to shopping, and train crossings). Just because developers have chosen to build high-end buildings near the train crossings shouldn't require the citizens of Ann Arbor to foot the bill to "correct" the issue. I also have past experience commuting through Livonia and Plymouth and trying to avoid the multiple train crossings. Sometimes I would be stopped for many minutes at a crossing, then continue on my way only to be stopped again. I am definitely against installing multiple crossing gates. Please save our tax dollars for other needs!

Scott lekel-Johnson

inside ward 5 February 15, 2019, 11:09 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Given the state of our roads, storm sewers, and general infrastructure, and the massive budget needs to improve those, I do not think it is sensible or useful to spend this amount of money on train horns. Please let's use that money to improve our roads!

Quiet Zone Assessment Survey

Name not shown

outside wards February 15, 2019, 11:10 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 11:22 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

The train noise is highly impactful to those who live within a half mile radius of the tracks, especially near intersections where the train horn is most frequeny. As Ann Arbor continues to expand, the train noise will need to be addressed. Doing it sooner will benefit the greater Ann Arbor community and encourage growth in the town, beyond downtown.

Name not shown

outside wards February 15, 2019, 11:26 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This seems like a transfer of money from the city as a whole to private landowners near the railroad. Railroads are noisy, I lived at Third and Liberty, and had friends at Ashley and Jefferson. If trains are too noisy, people shouldn't live near the tracks.

Nicholas Finn

inside ward 4

February 15, 2019, 11:35 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is a waste of money

Name not shown

inside ward 5 February 15, 2019, 11:38 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

My first choice is train horns are part of city life. If quiet zone is to be implemented, my preference is for scenario 2 (cost effective & safer with NO closures).

James Kirslis

outside wards February 15, 2019, 11:38 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I'm less likely to visit or want to move to the area if the train horns are silenced.

Scott Beinlich

inside ward 4 February 15, 2019, 11:40 AM

Quiet Zone Assessment Survey

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

Living at the Yard, the train noise wakes me up a few times a week at least. It would be fantastic if we could come up with a solution. Feel free to contact me if you have questions!

Name not shown

inside ward 5 February 15, 2019, 11:53 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Let's fix/improve the roads before we spend money on something like this.

Stephanie Reeves

inside ward 2 February 15, 2019, 11:55 AM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

This cost should not be borne by the taxpayers. If there are upgrades to be made, they should be paid for through a fee assessed on the developers who are building residential condos so close to the train tracks. People have lived close to these train tracks for years - why should there be noise upgrades now except for the new condos?

Name not shown

inside ward 4 February 15, 2019, 11:57 AM

Ouestion 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

When prioritizing spending money on needed projects within the city, I rank quiet zones as one of the lowest priorities.....especially at the current level and expected future level of train activity.

Name not shown

inside ward 4 February 15, 2019, 11:59 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

We should consider closures.

Craig Lounsbury

inside ward 3 February 15, 2019, 12:00 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I do not see any need for this other than to appease a small handful of mostly well to do upper class citizens who bought expensive Condos without thinking about any downside. I have lived in Ann Arbor since 1984 and nobody had a problem with train noise until million dollar (+/-) Condos popped up next to the tracks. I think there is way better use for tax dollars that could benefit a lot more citizens.

Colleen Stone

inside ward 5 February 15, 2019, 12:10 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

The cost is prohibitive when weighed against the benefit. I live within earshot of these trains and simply cannot fathom funding this effort when we have so many other competing infrastructure priorities that would accrue value to more residents of the city.

Name not shown

inside ward 2 February 15, 2019, 12:14 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Rachel Gerth

inside ward 4 February 15, 2019, 12:14 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 3

February 15, 2019, 12:22 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 2 February 15, 2019, 12:23 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

It's just noise, put the money elsewhere.

Jamie Dylenski

inside ward 4 February 15, 2019, 12:31 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I actually like hearing the train noise. But I would also like the crossings to be safe.

Frederick Paper

inside ward 5

February 15, 2019, 12:36 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 12:43 PM

Quiet Zone Assessment Survey

 Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

Please, please, please, make these safety improvements and create a quiet zone. I can't tell you many times the horns wake me night after night, especially in the summer. And not just once, but so many times each night. I'm a student and these horns really disturb my sleep. I've live here on the west side my whole life and the last five years have just been horrendous. Thank you for commissioning this excellent study.

Ross Orr

inside ward 1 February 15, 2019, 12:49 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I've lived 240 yards from the AARR (and about 400 yards from the Summit grade crossing) since 1990. The primary noise impact is the low rumbling from the train itself—long wavelength sound which easily penetrates walls and windows. There is no practical way to abate this, and it's a part of the character of the neighborhood. Furthermore over these years the volume of train traffic has fluctuated quite significantly (fewer trains when Yuma sand loading went on hiatus) and so current train traffic numbers may be an unrealistic indicator of the long-term sound issue.

Jessie Sahakian

inside ward 4 February 15, 2019, 12:50 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

To spend this much money on an issue that could be addressed by using a white noise machine or ear plugs is ridiculous. As long as there are homeless Ann Arbor residents, residents in poverty, residents who are food insecure, residents who solely rely on AATA for transportation, and residents who lack quality health insurance/care, to spend this much

money on noise is immoral.

Name not shown

inside ward 4 February 15, 2019, 12:51 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Ouestion 2

Please do not pursue this any further! If residents/citizens are requesting this, then create a train horn assessment district form a buffer of the train tracks (noise Zone) and tax those residents and businesses accordingly.

Seriously though this is just silly!

Name not shown

inside ward 5 February 15, 2019, 1:10 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I would be interested to learn if there have been injuries at these crossings. Would signal upgrades prevent injury at these crossings? What have other cities found after implementing upgrades? If so, I would be in favor of upgrades.

Brad Campbell

outside wards February 15, 2019, 1:15 PM

Ouestion 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Removing train horns makes for a noticeable and consistent

Quiet Zone Assessment Survey

improvement to the quality of life of people who live, work, or spend any time near train crossings. This is improvement continues to have benefit every single day for those impacted.

I lived in Ann Arbor for 10 years, and have recently moved to Charlottesville, VA, a similar sized college town. In Charlottesville the trains do not use horns and it is a wonderful upgrade from Ann Arbor that I noticed immediately and continue to appreciate.

I support scenario 3.

Name not shown

inside ward 4 February 15, 2019, 1:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The vast majority of owners (including myself) knew the train tracks were there and active when purchasing their home. I can hear the trains and don't find them more disruptive than any other traffic noise in Ann Arbor. The cost of this is very high for what we would get and I would much rather the money be used for needed infrastructure maintenance/improvements. It would be nice if the storm water drains were updated so streets don't flood before this is done. It would be nice if the PFAS and Dixoane is removed from the drinking water before this is done. It would be nice if the roads were fixed.

Name not shown

inside ward 1 February 15, 2019, 1:24 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There is no need to upgrade anything -- no one is going to leave their home or not rent a home / apartment / condo in downtown Ann Arbor simply because of the train sounds. You usually forget it is even there after a few weeks or two of getting adjusted. The locations are prime enough where a train horn isn't going to matter. And if it does matter to someone, it won't matter to 50 people taking that person's place.

Brad Keusch

inside ward 5 February 15, 2019, 1:30 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I lived adjacent to tracks for 3 years, next to crossings (plymouth and barton; first and washington) and found the noise to be a relatively minor inconvenience. The expenditure does not seem to be cost effective in my opinion.

Name not shown

inside ward 4 February 15, 2019, 1:32 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If you moved next to train tracks and you don't like it, move. They were there before you. If you want to update the equipment, issue a special assessment to those who live near this.

Name not shown

inside ward 4 February 15, 2019, 1:33 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I think that the noise is not the biggest problem. The biggest problem is how unsafe it is for cars and pedestrians to have a train passing through the city and that we do not have the correct signals. We must ensure the safety of our city.

James Eller

inside ward 4

Quiet Zone Assessment Survey

February 15, 2019, 1:40 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I believe safety should be number one priority. I do not think any roads should be closed off either. Traffic flow is already bad enough anywhere in the city

Name not shown

inside ward 4 February 15, 2019, 1:43 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 1 February 15, 2019, 1:43 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

We are constantly plagued by train horn noise, day and night, on Broadway, and we'd love to have this noise decreased in any way possible, and ultimately eliminated.

Name not shown

inside ward 5 February 15, 2019, 1:43 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live in Water Hill. I don't see this as a safety issue (nobody has died, surely \$10 million would have a bigger safety impact with crosswalks, opioid addiction or nearly anything else). This is really about train noise. I am indifferent to the train horn noise and see this as effectively a subsidy paid to people who elected to live along the tracks (myself included) and in doing so reaped a substantial discount on property values). If we do this, then how about we reassess property values all along this corridor to offset the cost? I am somewhat open to doing this north of the river, where the crossings are few, road closures are plausible and the cost is low.

Name not shown

inside ward 4 February 15, 2019, 1:48 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is a waste of money that needs to be spent on roads or public services such as leaf pickup etc.

Name not shown

inside ward 4 February 15, 2019, 1:49 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 15, 2019, 1:50 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 1:52 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I do not support closing any current public right of way without maintaining pedestrian/ non-motorized access. I urge you do not diminish the efficacy and purpose of the infrastructure at your purview. More subjectively as a former, and intimate, neighbor to the Chicago el (two-flat, directly backing up to brown line, trains 15-20 minutes until 3 AM) I range this concern from laughable to preposterous. I am most confident that residents of the many new units in close proximity to the CSX line will grow accustom to ALL the sounds of their neighborhood.

Name not shown

inside ward 5 February 15, 2019, 1:53 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The sound of a train's whistle blowing is a beautiful sound, one that belongs in a city, that belongs in our city. For those that have taken issue with the noises that come with living near the train tracks, why didn't they think of this before moving into a location that is near the train tracks? It's not like the trains have all of a sudden just started to blow their whistles as they cross through town. It would be irresponsible to spend any more money on this issue when there are more serious issues that face our community and require attention (i.e. road maintenance, affordable housing, clean/safe drinking water, etc.).

William Waters

inside ward 3 February 15, 2019, 1:57 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I wouldn't cheap out on safety if you are going to do a full implementation. I would rather have some crossings closed over not doing the highest safety. I would prefer Bowen and Wright close so higher safety can be implemented elsewhere.

Name not shown

inside ward 1 February 15, 2019, 1:58 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I don't believe it's worth spending taxpayer money that comes from citizens all over Ann Arbor to benefit a very small number of people who live near train tracks. If it is a high priority for those small number of people, they should consider a special assessment district.

Name not shown

outside wards February 15, 2019, 2:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 2:03 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

What percent of the of the population of Ann Arbor wants to spend the money not to have horns?

Name not shown

inside ward 2 February 15, 2019, 2:04 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 2:05 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Noise pollution is a serious issue and damages both the health of the people of Ann Arbor and its competitiveness in the economy. Overnight noise causes sleep deprivation, hearing loss, and increased risk of a multitude of diseases. This makes our citizens less healthy, less safe, and less productive. A one-time investment of \$8 million will more than make up for itself in reduced costs of healthcare and reduced productivity. I strongly recommend the highest safety option and aggressive action to combat noise pollution.

Name not shown

inside ward 1 February 15, 2019, 2:05 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The trains are an important part of the character of Ann Arbor. I find it upsetting that new residents of luxury apartments near the tracks are surprised and bothered by this expected feature. The city has much more important ways to spend its money rather than paying millions of dollars on reducing this noise.

Name not shown

inside ward 4 February 15, 2019, 2:11 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 2:11 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The train has been running through downtown longer than anyone has lived there. The people that bought adjacent to a track new that the track was there. The train runs once a day each way. Deal with it.

Name not shown

inside ward 5 February 15, 2019, 2:17 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Do not close any roads to mitigate the train issue. It's already tough enough to get around town with the traffic as is. The freight has minimal impact versus closing streets.

Quiet Zone Assessment Survey

Name not shown

inside ward 1 February 15, 2019, 2:21 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live 850 feet from the Amtrack line, and 650 feet from the NS freight line. I think the sound is fine.

Name not shown

inside ward 4 February 15, 2019, 2:35 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There are other pressing needs for these millions of dollars.

Emma Enache

inside ward 5 February 15, 2019, 2:41 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 2:47 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live on West Hoover, 0.4 miles from the train tracks. I feel that I am not negatively impact by train noises. A significant number of "high end" complexes have been built recently near the train tracks with the knowledge of train presence and noise, I believe that anyone moving to or purchasing a house near the train tracks must accept the risks that go along with that decision. Side note: The polling option for Scenario 2, 3, or 4 states "no closures" however these options do include road closures and obfuscate that poll selection option.

Name not shown

inside ward 5 February 15, 2019, 2:48 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Matthew Evett

inside ward 3 February 15, 2019, 2:56 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 2:57 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

No response

Name not shown

inside ward 1 February 15, 2019, 3:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

People choose to live and build near crossings. They could choose to live/build somewhere else.

Name not shown

inside ward 5 February 15, 2019, 3:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 3

February 15, 2019, 3:18 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1

February 15, 2019, 3:33 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I have lived on Madison Street which is very close to the freight train that goes through every morning around 5 am. Like many if not most people, you just get used to it. People can always move elsewhere if they are close. I don't view this as a good use of money.

Name not shown

inside ward 1

February 15, 2019, 3:51 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5

February 15, 2019, 3:52 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Too bad for the owners of the new units. Maybe you shouldn't have built it or bought into the place knowing tracks were right there.

Dave Russell

inside ward 3

February 15, 2019, 3:53 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

No response

Thomas Naumoff

inside ward 4 February 15, 2019, 4:11 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I hear the trains nearly every morning. I enjoy the sound of the whistle at its' noisiest and as it goes off into the distance fading. Very beautiful and dreamy. I've lived in Ann Arbor for over forty years, hearing the train nearly every day with no complaints. I have never wakened sweaty and screaming because of the train whistle. I look forward to hearing the morning train whistles and the train rolling and rumbling along the tracks. Summer is the best with my windows open to the coming bright morning and the sounds of the early morning train.

Name not shown

inside ward 5 February 15, 2019, 4:12 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Pedestrian safety projects are a higher priority than projects to improve property values. I would be fine with a quiet zone if the immediate landowners created a special assessment district to pay for it as their property values would be the ones to most benefit, but this is not a cost that should be carried by the City as a whole.

Name not shown

inside ward 2 February 15, 2019, 4:12 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 4:26 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Michael Slade

inside ward 4 February 15, 2019, 4:27 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 4:33 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is a total waste of money. People (including myself) have lived next to the tracks for MANY DECADES without any harm from the noise. You get used to it. If you can't handle noise then DON'T MOVE INTO A BUILDING NEXT TO THE TRACKS! Satisfying the kids in "The Yard" is

Quiet Zone Assessment Survey

not a reason for the city to spend this much money when there are so many other important needs, including affordable housing, early childhood education, greenway development, and fewer potholes in our streets, where this money could be used effectively. Please don't manufacture a crisis where none exists. The A2 city government risks being viewed, nationally and internationally, as an embarrassing bunch of crazy liberals if we try to "get out in front" on this new "menace to public health". Earplugs are a much cheaper option. #yesontrainhorns

Name not shown

inside ward 5 February 15, 2019, 4:36 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We live right next to the Jefferson & Ashley crossing. The sound of the trains are not a big deal. They provide an ambiance not available everywhere.

Save the taxpayers money.

Robert OBrien

inside ward 5 February 15, 2019, 4:43 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 4:55 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 5:02 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I live very near the train tracks, and for me the problem is simply one of timing: I hate being blasted out of bed by prolonged train horns at 3 a.m., particularly during summer months when windows are open. I have no problem whatsoever with train horns being employed during daylight hours when they are most needed anyway. Could we not simply have a no-horn policy between certain nighttime hours, such as 1 a.m. - 5 a.m., when there is little motor vehicle traffic anyway? Even a lighter touch than is currently used by many engineers would be a huge help and improvement. There is a big difference between operators, trust me on this. To me this solution gets at the problem at the core and in a much, MUCH more cost effective way than the complicated proposal, though I certainly appreciate your time and attention to the matter. I doubt that anyone really wants no horns during the daylight hours, or cares. I honestly can't even recommend the cheapest option above; I only checked that box to be able to provide these comments. Please do feel free to contact me. Thanks again so much.

Name not shown

inside ward 1 February 15, 2019, 5:13 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Rachel Feirstein

inside ward 4 February 15, 2019, 5:16 PM

Quiet Zone Assessment Survey

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 5:38 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 15, 2019, 5:48 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Don't live near train tracks if the sound is too loud.

Name not shown

inside ward 4 February 15, 2019, 5:53 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live right next to an active train line (my bedroom window is 50 feet or less from the the madison crossing). I haven't been woken up by the train

since the first two weeks I moved in. While having a quiet zone would be nice, it is not worth \$6 million+ for the mild noise reduction.

Heather Schofield

inside ward 5 February 15, 2019, 6:21 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I lived very close to the train tracks at Longshore drive for several years. I could hear the train horn but was never bothered by it, it was a noise I quickly got used to and accepted as part of living in that location. It seems like a waste of money to spend millions of dollars on something that people have been tolerating for years without issue and know will be present before they buy or rent their living location.

Name not shown

inside ward 5 February 15, 2019, 6:46 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Let's save a little money and go with the closures--these are hardly high volume roadways.

Name not shown

inside ward 2 February 15, 2019, 6:51 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is a ridiculous waste of money in a town that needs road repairs, better snow removal for pedestrian walks and bike paths, clean up of

Quiet Zone Assessment Survey

parks and local school grounds. Cities deal with train noise all over the country. Why does Ann Arbor feel the need to pander to those few who hear the trains loudly? And closing streets!!?? Are you kidding? In a city that gets more congested by the moment.

Name not shown

inside ward 3

February 15, 2019, 7:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This money could be better spent on improving upon affordable housing and addressing our water infrastructure.

Name not shown

inside ward 5

February 15, 2019, 7:05 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 3

February 15, 2019, 7:11 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5

February 15, 2019, 7:23 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

The railroad was here when any of us moved in, as were its accompanying sounds. The millions necessary to mitigate horn noise can be better spent elsewhere.

Name not shown

inside ward 5

February 15, 2019, 7:30 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5

February 15, 2019, 7:37 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5

February 15, 2019, 7:50 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 8:01 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The number of trains through Ann Arbor is small and so is the impact. Not where the city should spend money.

Name not shown

inside ward 2 February 15, 2019, 8:06 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Fix the city's roads! Clean and maintain city parks! Repair and maintain the Recycling Center! Fix the sewers to prevent overflows into the river!

Joe Tiboni

inside ward 1

February 15, 2019, 8:08 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The train horns are not problematic and do not warrant this substantial public expenditure!

Robert Eanes

inside ward 1 February 15, 2019, 8:10 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I have lived 1 block from the train crossing on Longshore for 20 years. I enjoy the blowing horns at all hours of the night. We might want to spend the money on making the pedestrian cross walks much safer. I would rather be able to cross a street safely. Why would you choose to live next to the tracks, then complain about the stress of hearing a horn?

Name not shown

inside ward 4 February 15, 2019, 8:10 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

Why are options 6&7 not offered independent of one another? Option 7 clearly makes the most sense in balancing cost with crossing volumes and impacts to safety.

Name not shown

inside ward 4 February 15, 2019, 8:11 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

inside ward 5

February 15, 2019, 8:30 PM

Quiet Zone Assessment Survey

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

I'm annoyed with the horn during normal sleeping hours, typically between midnight and 6am. It seems like the most cost effective and rational option would be to work with the A2 Railroad to not operate through downtown during that time frame.

Name not shown

inside ward 1 February 15, 2019, 8:38 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Thomas Bissonnette

inside ward 4 February 15, 2019, 8:48 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

outside wards February 15, 2019, 8:51 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If you choose to live near train tracks you should expect to hear train sounds. This is a major waste of taxpayers money.

Name not shown

inside ward 5 February 15, 2019, 8:57 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I like the train noise. To hear it blowing in the night, it's like in a movie. Being in a city and hearing city noises is great.

Name not shown

inside ward 5 February 15, 2019, 9:01 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 9:39 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I think the money would be spent better in other places

Name not shown

inside ward 5 February 15, 2019, 10:22 PM

Quiet Zone Assessment Survey

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I think there are far more useful and important ways to spend City money. People who are concerned about train noise should not choose to live so close to the railroad tracks, and developers who want to sell luxury apartments should site them elsewhere if they think their clients will be disturbed by the noise. Taxpayers should not have to subsidize the poor choices of a relative few while issues that affect the entire city continue not to be addressed.

Roger Lelievre

inside ward 1 February 15, 2019, 10:27 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Fix the roads first!!!!!

Name not shown

inside ward 5 February 15, 2019, 10:39 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Casey Yeager

inside ward 3 February 15, 2019, 10:39 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 15, 2019, 10:41 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Name not shown

inside ward 4 February 15, 2019, 11:34 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Any person who thinks wasting taxpayer money for this when we have roads to fix, etc, etc, etc, has either lost their mind, or is taking the city's citizens for morons! If some developer comes in and makes a fortune selling condos to rich folks who didn't have the intelligence to look out the window and know what those tracks were for is not worth the time and money spent on this survey! C'mon Ann Arbor! This screams the same stupidity as the border wall! Is this what we have become? I don't mind the development, but stuff like this may make me reconsider my position!

Jordan Adema

inside ward 5 February 15, 2019, 11:41 PM

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No public money for the benefit of the rich!

Name not shown

inside ward 5 February 15, 2019, 11:48 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

The train tracks have been there for a long time. Nobody doesn't know when they buy a house near train tracks that trains make noise.

Fred J. Beal

inside ward 1 February 15, 2019, 11:49 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Train noise is an amenity, not a problem in Ann Arbor

Name not shown

inside ward 2

February 16, 2019, 12:30 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 16, 2019, 1:10 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I like the sounds of trains at night a lot! And we really need to spend that money on other things like fixing the roads, on mitigating toxins in our water, or on affordable housing.

Karen Prochnow

inside ward 1 February 16, 2019, 1:26 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If every resident impacted by the train crossings used earplugs, the city could save millions of dollars. This is not my problem and I don't want any of my tax dollars spent upon it. I would much prefer we solve an actual problem like leadership upon climate change. These trains have been running for 100 years. Trains make noise. Those who live near traintracks will hear them.

Stacey Weid

inside ward 5

February 16, 2019, 2:36 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5

Quiet Zone Assessment Survey

February 16, 2019, 2:42 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 16, 2019, 6:04 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I hear the train horns at my home and enjoy hearing them.

David Haig

inside ward 1 February 16, 2019, 6:11 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I lived right next to the tracks at State and Depot. Not only did I get used to the sound and eventually enjoyed it. I would never have DREAMED of asking the city to spend millions to fix it.

Name not shown

inside ward 1 February 16, 2019, 7:06 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 16, 2019, 7:11 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This seems like a huge waste of funds. The cost doesn't seem to balance with the specific benefit for a small number of residents who complain about the externality on their property when they have every ability to soundproof their abode (at much lower cost) or sell their property (at no cost to the city).

Name not shown

inside ward 3 February 16, 2019, 7:13 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

David Dve

inside ward 5 February 16, 2019, 7:14 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I think there are many more important projects that should be taken on before any crossing changes are made. A few people making a fuss when most are not inconvenienced just does not justify the expense required.

Quiet Zone Assessment Survey

With the increase in population density noise will become more of an issue, not just the train for a few minutes in the night. Please, focus on more important projects that will benefit many residents and not just a select few.

Ingrid Racine

inside ward 3 February 16, 2019, 7:15 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I have lived in multiple residences near, even next to, the train tracks in Ann Arbor. Love the sound of that 2am train going by— it's a treasure. Please use city funds on more urgent needs, like clean water, affordable housing, roads repairs...

Name not shown

inside ward 5 February 16, 2019, 7:15 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

While most nights I do briefly wake to the horns, at nearly 1 mile from the tracks the noise level has never been a nuisance for my family. In my view the point of the matter is more of modernization and public safety; as a 5 year resident the train horns give me no romantic sentiments of A2 being a small town, rather they seem like a podunk remnant of years neglecting & failing to prioritize basic infrastructure upgrades. Optics seem to be A2 can't afford it when actually this project cost seems relatively insignificant compared with other potenatial projects under consideration...the bang for the buck with this one seems a great value. Thank you.

Nora Schankin

inside ward 5 February 16, 2019, 7:33 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Stop wasting our tax money. Put more police back on beat patrols, and fix the damn roads.

Name not shown

inside ward 3 February 16, 2019, 7:56 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

outside wards February 16, 2019, 8:00 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If you don't want to live with train noise, don't live near train tracks (or buy ear plugs). The money would be better spent on education and infrastructure.

Name not shown

inside ward 5 February 16, 2019, 8:03 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Do not disrupt traffic for all for this minor issue

Quiet Zone Assessment Survey

Peter Smith

inside ward 5 February 16, 2019, 8:12 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 16, 2019, 8:18 AM

Question 1

 Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I live near the Dhu Varren crossing and would love to have the noise reduced.

Name not shown

inside ward 5 February 16, 2019, 8:22 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Without effective gates, the trains going through Ann Arbor are high risk and unsafe for pedestrians. The secondary benefits of quieter trains is fully welcome.

Name not shown

inside ward 4 February 16, 2019, 8:24 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 16, 2019, 8:28 AM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

The safety of pedestrians is highest importance, this has been needed and will only get more dangerous not having it.

Name not shown

inside ward 2 February 16, 2019, 9:16 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Trains are part of the charm of AA. I like hearing the horn at night. Anyone buying next to a train track should expect to hear the train.

Cyndi Davis

inside ward 3 February 16, 2019, 9:28 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

People bought knowing the tracks were there. Taxpayers should not pay for their choice.

Quiet Zone Assessment Survey

Name not shown

inside ward 5 February 16, 2019, 9:47 AM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

ina wesenberg

inside ward 5 February 16, 2019, 9:57 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The train noise has absolutely no negative impact on my life. I have lived on West Liberty St for over 40 years. I enjoy hearing the train especially the whistle. Much like the traffic wizzing by on West Liberty St, both night and day it is part

of the comfort of living in a city. I see no reason to spend money on "quietness" it is a very silly way to spent our tax dollars. If you live in a mid sized city, and you value the accessibility and the charm of the city, you abide by the comforting noise of the train. It hardly requires this much attention "Train noise" is not an issue the city council should be dealing with: how silly we have so many other issues that require careful consideration. AnnArbor is a mid-sized city: you live in the city you hear the sounds of the city. Completely a waste of valuable time for our council members. It is important to understand that the public "cry for change" in our city should be focused on real issues!

Name not shown

inside ward 5 February 16, 2019, 10:09 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 16, 2019, 10:24 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I have stopped driving in download Ann Arbor owning to terrible parking especially for handicapped persons.

Name not shown

inside ward 1 February 16, 2019, 10:24 AM

Ouestion 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I've lived a block from the summit crossing for 20 years. It is appalling that we're even talking about spending millions to address this. it is a non-issue. People who are unable to adjust to living near the train tracks should take responsibility for themselves and not make this the city's problem. Thank you.

Name not shown

inside ward 5 February 16, 2019, 10:37 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I think train horns make Ann Arbor a quaint midwestern town and would hate to lose them. I would think twice about buying a house here

Quiet Zone Assessment Survey

WITHOUT the train noise.

In all seriousness, the inconvenience of closing Ashley street, in particular, would be far greater than the train horn noise. I live on the old west side very close to the tracks. While I think modern, upgraded crossings would be nice, I question the cost of this at over \$7 million when the city's streets are full of pot holes. The people moving into the new high rises along the tracks should have thought about train horn noises before they moved there or before those buildings were built. Developers should have paid the costs if the residents of their buildings are concerned about the train noise.

That said, if the crossing upgrades were part of a larger regional transit plan to make commuter rail travel between Ann Arbor and Brighton a possibility in addition to just making train horns quiet, that would be worth the cost.

Name not shown

outside wards February 16, 2019, 10:49 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

The already-high costs of these crossing safety improvements do nothing to mitigate the traffic issues caused by the trains crossing these roads. Better to wait until the roads require complete rebuilding, and change grade of either road or tracks to eliminate both the need for sounding horns and impeding traffic flow.

Name not shown

inside ward 5 February 16, 2019, 11:04 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The city has too many needs right now to spend literally millions of dollars on something that has existed before we all were born.

Name not shown

inside ward 2 February 16, 2019, 11:06 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The train tracks have been in place for decades. I cannot imagine any current residents moved in BEFORE the tracks were there. Given the many, many pressing needs in our city (especially safer drinking waters and better roads), any amount of money spent to address noise complaints those who chose to purchase in proximity of existing tracks would be an incredible misallocation of limited taxpayer dollars.

Name not shown

inside ward 5 February 16, 2019, 11:08 AM

Question 1

 Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 5 February 16, 2019, 11:14 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No catering to special commercial interests of "luxury" landlords. They knew what was coming when they built their luxury apartments. Maybe they should have invested in better sound-proofing.

Name not shown

inside ward 1

Quiet Zone Assessment Survey

February 16, 2019, 11:16 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 16, 2019, 11:22 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If people don't want to live near train tracks and the noise that comes with active train tracks, they should not buy condos within spitting distance of said train tracks. This is not hard. No taxpayer should have to fund unnecessary road work for the benefit of a couple hundred really stupid rich people. Actual road improvements that need taxpayer funding include repaving streets in and around Ann Arbor that are riddled with potholes and patches and cracks. Certainly not upgrades to make some butthurt occupants of a condo development sleep easier.

Name not shown

inside ward 5 February 16, 2019, 12:14 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I live in the 600 block of S.1st St. I'm never bothered by the train horns that I hear from time to time. I know that some of my neighbors and acquaintances have experienced loss of needed sleep due to train horns and are in favor of the proposed Quiet Zone. Given that there have been no crashes at any of the crossings in the area during the last 5 years, and in support of Quiet Zone seeking neighbors, I would have to support the scenario with the highest safety rating in order to ensure that we have the best chance of continuing the excellent record of no crashes. I don't see

the point of phased implementation. The savings don't seem significant.

Name not shown

inside ward 1 February 16, 2019, 12:31 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Ouestion 2

I live near Huron River Drive and hear the horn nearly every night. Sometimes it wakes me up, but the city has many more pressing problems which require city revenues. I don't feel this issue is a budget priority.

Name not shown

inside ward 1 February 16, 2019, 1:08 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I support Scenario 4 closing two crossings (Bowen and Ashley). I figure that 30,000 residents are affected by train horns at night, so the capital cost of a 6-7 million dollar project (about \$200/affected resident) and the annual maintenance cost of below \$2/affected resident is worth it. I am fine with any of the Scenarios 1-5.

Stephanie Mecham

inside ward 4 February 16, 2019, 1:44 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Quiet Zone Assessment Survey

Name not shown

inside ward 4 February 16, 2019, 2:50 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This will add a lot more clutter to the downtown streets. The sound of the alarms/clanging at each of the intersections, while not as loud as the horn, persists longer and would be even more annoying in my opinion.

Name not shown

inside ward 5 February 16, 2019, 3:51 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is a horrible investment for the City to make. If the new condo developers downtown want to build next to the tracks then they should charge a fee into their new developments to put up these gates if their residents want them.

Name not shown

inside ward 5 February 16, 2019, 3:52 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Tracks were not recently installed in Ann Arbor, and anyone who is within sound of train noise has known it since before they moved in. If people want absolute silence, move away from a city or get noise blocking headphones. Seems like anything Cynthia Redinger and Eli Cooper are involved in is a little far-fetched. I wish they'd work instead on keeping the roads in good shape - they are an embarrassing mess. Lousy for those who live, commute or visit Ann Arbor. In fact, A2 is beginning to look

distressed with pot-holed roads and dirty sidewalks; the public spaces downtown and State St are tired looking. Let's freshen the city if there is \$7 mil to burn. Fix the roads, install public art and, for the love of god, convince Tim Marshall that his BofAA billboards and advertising slogan has long run out of cute. Thanks for asking.

Name not shown

inside ward 1 February 16, 2019, 4:10 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If those who don't like the train horns, then they don't need to live by them. I grew up between a railroad track and Willow Run airport and you get used to the sounds around you. Ann Arbor can use that money for more useful things such as fixing Plymouth Road that runs along the railroad track at Barton Drive.

Name not shown

inside ward 1 February 16, 2019, 4:40 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

A waste of money fixing a total non-problem. Train horns have been with us for decades and now all of a sudden it is a problem? I live rather close to the tracks and I think this idea is totally ridiculous. Also the moment your expensive solution fails and someone dies or is grievously injured because of it, it will just go back to the way it was anyway. Please put money to much better use than this.

Patrick Murphy

inside ward 4 February 16, 2019, 4:47 PM

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment.

Question 2

As a city homeowner and taxpayer I am opposed to these measures. This proposal will be costly, potentially disruptive to traffic flow in the affected areas, and it's benefits will be limited to a relatively few people, virtually all of whom were aware of the sound of passing trains when they moved into their neighborhood.

Name not shown

inside ward 1 February 16, 2019, 5:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

i live near summit crossing. i like the horn.

Name not shown

inside ward 5 February 16, 2019, 5:34 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

As someone who lives very close to the train tracks on south first street, I don't understand the big deal. Seems that there is little evidence of safety problems and the noise level is tollerable even so close. Rarely disturbs me at night

Michael Kvicala

inside ward 5 February 16, 2019, 6:04 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

Number of interesting points in the Quite Zone Assessment report:

- 1). Average number of trains per day: only two
- 2). No accidents/incidents since June 2011
- 3). Recommendations of using 60'-100' concrete "Non-Transversable Medians" (or stand-alone "Channelized Delineators") throughout unfeasible. They will get torn up quickly and will create hazard in themselves. Besides, they are butt-ugly
- 4). Closure of streets is a ridiculous proposition, as is eliminating onstreet parking and making certain streets one-way
- 5). Requiring commercial properties to reroute ingress/egress to their business a hidden cost
- 6). Unknown costs for rerouting utilities will certainly pile-up
- 7). Interesting to note that "No Treatment" was indicated on 3-point rating for most all of the crossings studied.

Bottom line as far as I'm concerned: too expensive at \$7M (plus annual maintenance). This proposal is to appease a small number of (albeit vocal) residents who knew that the trains were there before they moved into that new, expensive apartment/condo or gentrified neighborhood. I think my tax dollars can go to better use.

Name not shown

inside ward 3 February 16, 2019, 6:15 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 16, 2019, 6:50 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

I like that the trains make noises -- I find them comforting and just a part of my neighborhood. I don't see how spending millions of dollars to update to a quiet zone benefits anyone except those who knowingly live

Quiet Zone Assessment Survey

near the tracks. They were there when you bought your house, rented you apartment, etc...

want a quiet zone and increased safety measures to boost our quality of life.

Janet Osbon

inside ward 5 February 16, 2019, 6:58 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We have more important ways to spend our tax dollars. The train noise is pleasant to me, I live 4 short blocks from a crossing on the Old West Side.

Robert Gronemeyer

inside ward 5 February 16, 2019, 7:25 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Sasha Greer

inside ward 4 February 16, 2019, 7:31 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

This report is inaccessible to the general population and forces the reader to connect the dots. The phrasing of the choices depict obvious bias and do not give a succinct options for individuals. All scenarios except 1 do not lead to a quiet zone, but that is not easily discerned by the residents of Ann Arbor voting on this. Next time, make the executive summary and conclusion a "TLDR" without muddling the true consequences and outcomes of the listed decisions in jargon and technical language. We

Name not shown

inside ward 3 February 16, 2019, 8:20 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

People who live near train tracks should understand that it might be noisy.

Lynn Lumbard

inside ward 4 February 16, 2019, 8:27 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Nothing wrong with the sound of trains. If you have a problem with the sound of trains probable shouldn't buy next to the tracks.

Name not shown

inside ward 5 February 16, 2019, 8:27 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I kinda like the sound in the morning. And I paid attention when I bought my house.

Name not shown

inside ward 5

Quiet Zone Assessment Survey

February 16, 2019, 10:29 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I enjoy the train whistles.

Lelia Raley

inside ward 4 February 16, 2019, 11:27 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 17, 2019, 1:29 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I suggest people not choose to live next to the train tracks if the noise disturbs them. Having all residents pay for a fix, when the city has so many other pressing needs, is absurd.

Name not shown

inside ward 3 February 17, 2019, 3:12 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Please implement one of the scenarios.

Name not shown

inside ward 1

February 17, 2019, 5:07 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live within a few hundred feet of Train tracks and the train horns have had no impact on my life. I do hear the train horns and always enjoyed hearing them.

Name not shown

inside ward 1 February 17, 2019, 5:51 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Keeping train crossings safe is job number one. Let them blow their horn to keep people safe.

Name not shown

inside ward 2

February 17, 2019, 7:14 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Alan Goldsmith

Quiet Zone Assessment Survey

inside ward 4 February 17, 2019, 7:47 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This needs to be at the bottom of the priority list, with all of the other infrastructure issues in the city.

Name not shown

inside ward 1 February 17, 2019, 8:04 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 17, 2019, 8:11 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We have more pressing infrastructure matters than train horn noise. I am sorry for those deeply impacted but I don't believe this is a top priority.

Name not shown

inside ward 5 February 17, 2019, 8:18 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Ann Arbor needs to prioritize drinking water and roads. The railroad predates the construction, buyer beware.

Name not shown

inside ward 3 February 17, 2019, 9:16 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Elizabeth Brooks

inside ward 1 February 17, 2019, 9:28 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live on Traver Road, in very close proximity to the Ann Arbor Railroad. We can see the train from our house, it's that close. I have a baby even. The noise is not bad enough to spend this kind of money on a solution like this. It really doesn't bother us at all. We like hearing the train whistle. And the sheer noise of the train on the tracks itself is almost as loud if not louder at times — so you would not actually be solving the problem of "train noise".

Name not shown

inside ward 5 February 17, 2019, 9:41 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

No response

AARON DODD

inside ward 1 February 17, 2019, 9:49 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Leah Gillon

inside ward 5 February 17, 2019, 10:27 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

Trains have a smaller carbon footprint than other shipping/transportation methods and we shouldn't do anything to impede them. Let's spend this money on the Climate Action Plan, on which very little progress has been made. Anyway, the inescapable noise of cars and trucks is much worse.

Name not shown

outside wards February 17, 2019, 11:29 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 February 17, 2019, 11:57 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Trains are few and far between, and their horns don't bother me at all. What I do object to most strenuously is the constant racket from M-14, particularly the M-14 bridge, and the other highways that ring Ann Arbor. You can't escape it, day or night, and it significantly degrades Ann Arbor's quality of life. Our neighborhood on the north side was here long before M-14 and the M-14 ridiculously dangerous entrance/exit bridge, and our neighborhood should qualify for noise abatement from MDOT. Maybe someone in city government should take this up with MDOT?

Name not shown

inside ward 1 February 17, 2019, 12:07 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

William Allen Simpson

inside ward 5 February 17, 2019, 12:18 PM

Question 1

 Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

All of your options say "no closures". But the assessment has closures listed. Hard to make a recommendation when the survey doesn't match the report.

Moreover, the report lists grade separation with 100% effectiveness. In the mid-section, the cost of raising the rail should be far cheaper than the

Quiet Zone Assessment Survey

\$6 million in costs listed.

Felicity Hills

inside ward 4

February 17, 2019, 12:20 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4

February 17, 2019, 12:45 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 1

February 17, 2019, 12:49 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Please don't waste money on this. Seriously, the people with issues can buy 99 cent earplugs. Or they can leave.

It's ridiculous to spend millions of dollars on making things quiet for a few people with a lot of money, when Ann Arbor lacks affordable housing.

Plus, I like the sound of the trains.

Name not shown

inside ward 4

February 17, 2019, 12:53 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Waste of money if anything moves forward. Homeowners knowingly bought near tracks. Don't like it move and let someone else enjoy the location.

Susan Cybulski

inside ward 5

February 17, 2019, 1:09 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Please do not pursue implementing this project. There are so many more urgent priorities in our community, including clean water, road repair, infrastructure upgrades, and climate action -- let alone maintaining and improving basic services! FYI, I live less than one mile from downtown train tracks, and am not bothered by the sounds of train horns.

Name not shown

inside ward 4

February 17, 2019, 1:12 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

Next, tackle the endless upstairs noise most every morning (\sim 6:3o am) with passenger jet aircraft climbing out of Detroit Metropolitan Airport (DTW) directly over Ann Arbor

Name not shown

Quiet Zone Assessment Survey

inside ward 4

February 17, 2019, 1:31 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 1

February 17, 2019, 1:38 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The A2 Railroad train crossings have been here for decades, and should not be a surprise to anyone contemplating a move near the tracks. The city struggles to adequately maintain the infrastructure it already owns, and should not take on the cost to construct and maintain enhanced crossing protection.

Timothy Cheek

inside ward 1

February 17, 2019, 1:51 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Don't do anything to make traffic worse.

Name not shown

inside ward 5

February 17, 2019, 2:05 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Beyond the noise - trains speeding through town with only blinking lights to warn drivers is not safe.

Please fix the crossings!

Peter Larson

inside ward 1

February 17, 2019, 2:22 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I believe this an extreme waste of money. How can the city afford this after debacles like the library lot? Can't we use the money to do something useful for everyone and not just a few noisy people living in condos along the tracks?

Ann Arbor government has to be for the people, not simply for a few people in a couple areas. Take that money and build housing to alleviate our housing crisis in this town.

Faith Wood

inside ward 4

February 17, 2019, 2:40 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

outside wards

February 17, 2019, 2:49 PM

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment. I accept the impact of train horn noise and recommend no further investment.

Question 2

People bought next to these areas, they knew this ahead of time

No sympathy No money spent

Question 2

I have lived less than a half block from the Ann Arbor railroad since 1992. I enjoy all aspects of the train. In fact, I gauged my relationship to the tracks and crossings before I bought this property and decided it was a perfect distance and closeness. Others should have done the same.

Name not shown

inside ward 4 February 17, 2019, 2:49 PM

Name not shown

inside ward 4 February 17, 2019, 3:47 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Question 2

No response

Name not shown

inside ward 3 February 17, 2019, 3:00 PM

Name not shown

inside ward 5 February 17, 2019, 3:56 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

The trains around town do not seem cumbersome and I've never been bothered by the noise. For those who have chosen to live in close proximity to a train path, I would expect that to have factored into their decision. For years I lived near the highway and never expected accommodations to be made to help with the noise - noise I knew full well to expect going in. To have others pay for their decision has me more than disturbed and I cannot express my opposition to enough.

Question 2

No response

Joel Henry-Fisher

inside ward 1

February 17, 2019, 3:57 PM

Laurie Feldt

inside ward 5 February 17, 2019, 3:40 PM

Question 1

Question 2

 I accept the impact of train horn noise and recommend no further investment.

Question 1

I live by the tracks. I have for 16 years. The trains are nice. And have been $\,$

Quiet Zone Assessment Survey

here for a very long time. Perhaps longer than my 130 year old house even... And property taxes are waay high enough. No need to waste any money on "solving" a non existant problem. Please. No need to pander to likely new wealthy residents with sensitive ears who moved next to tracks and then regretted their decision. If anything, Ann arbor needs more industry, grit, noise, trains etc. Not less. If the money must be spent, please spend it on affordable housing.

Name not shown

inside ward 1 February 17, 2019, 4:15 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Having land near Wright street, we have complained, discussed, circulated petitions numerous times regarding the trains without resolution. However, new "luxury" (rich) apartment owners start squaking and a noise study is conducted with various solutions. WOW! Talk about prejudice against the working class tax payer of Ann Arbor! If you select only improvements to crossings south of Summit, you will totally prove elitism!

David Breher

inside ward 1 February 17, 2019, 5:17 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

We don't have enough train traffic to be a concern, especially given limited resources. In fact, some citizens enjoy the sound of the trains, and accept that the horn is a decent warning signal. I live within a five-minute walk to the AA-Toledo line, and a ten/fifteen minute walk to the Toronto-Chicago line. At these distances, I find the train traffic to be somewhat pleasant. The constant noise of the freeways, however, can be oppressive. But the noise and the Deisel and CO fumes from internal combustion engines are part of the price we pay for our high standard of living. Let's use our taxes more effectively for some project other than the current proposal.

John Perrett

inside ward 5 February 17, 2019, 6:20 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 17, 2019, 7:01 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I spent nearly a decade living near the train tracks, and yes, the train horns at night could be a little annoying. Still, it astonishes me that this is a discussion we're even having. How could we possibly justify spending millions on a really minor quality-of-life improvement for a small subset of residents when our affordable housing fund is empty and our roads are crumbling?

Ryan Dybdahl

inside ward 1 February 17, 2019, 7:22 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Scenario 2 with no closures, could be completed in phases.

Name not shown

inside ward 1 February 17, 2019, 7:49 PM

Quiet Zone Assessment Survey

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Andrew Wilhelme

inside ward 1

February 17, 2019, 8:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

please use the money saved from not doing anything and use it for affordable housing.

Mark Fate

inside ward 5

February 17, 2019, 8:20 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

inside ward 4

February 17, 2019, 9:10 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I am open-minded about railroad improvements for safety reasons, but not for noise reasons. At any of the proposed funding levels, those dollars

could pay for a LOT of services for the underprivileged.

The other alternative I would be open for is to have the developers fully fund the improvements that would reduce noise for their condo residents.

Name not shown

inside ward 4

February 17, 2019, 9:13 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Living directly adjacent to the train rails, I hardly ever hear horn disruptions. Even if I do hear warning horns from the train, they are not disruptive to me

John Jasa

inside ward 1

February 17, 2019, 9:42 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The train horns at night could be a little annoying. Changing that is not worth spending millions of dollars, though, and that money should instead be used for other projects, such as affordable housing or repairing roads.

Name not shown

inside ward 5

February 17, 2019, 10:15 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live immediately next to the William Street crossing. When I moved there five years ago, I didn't think I could possibly ever get used to the train

Quiet Zone Assessment Survey

horns. Now I sleep through them, and even find them soothing. I realize others are not so fortunate, but we've lived with these trains for years and I can't see spending that kind of money for minimal benefit.

Name not shown

inside ward 1 February 17, 2019, 10:23 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I am not opposed to some closures where access is obtainable without extensive rerouting. Some of the minor streets have little traffic and it is hard to justify the expenditure to bring the crossing up to Quiet Zone code. I think home owners will realize some gains from closure and not just feel the loss of easy access. What is the point of a survey if closures are not one of the options?

Name not shown

inside ward 4 February 17, 2019, 10:51 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 5 February 18, 2019, 7:34 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

If downtown San Diego with all its rail modalities can have a very successful "no horn" zone, the progressive City of Ann Arbor can, too.

Since we want high density in the downtown area, adjustments must be made for commensurate quality of life and health issues. Yes, the RR was there before the high rises, but it was originally dedicated to local manufacturing, now gone, right in the midst of the city. If you check out Google under "Quiet Zones," you will see that California is way ahead of us in reducing noise in their cities, e.g.

https://www.delmartimes.net/encinitas-advocate/news/sd-cm-enc-0323-trains-ut-20180319-story.html

Name not shown

inside ward 5 February 18, 2019, 8:21 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

People prior to buying these must have been well aware of their proximity to railroad tracks. Let them ear earplugs. No \$\$\$\$ should be spent. Ridiculous.

Todd Newman

inside ward 2 February 18, 2019, 8:24 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Complete waste of money. The cheapest bill is pushing \$7m. Do we really have money to spend on this? Is this the best we can do? Could we plow the roads maybe? How about fix the potholes? Pick up leaves? Save it for a rainy day? More police? More firemen? Reduce taxes? (I know, that last idea is completely absurd, but I thought I would throw it out there.)

Name not shown

inside ward 1 February 18, 2019, 8:49 AM

Quiet Zone Assessment Survey

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Recommend city limiting residential development AND implementing mandatory adoption of residential noise reduction building code for areas immediately surrounding/along train tracks- the latter can be a source of partial funding for this project.

Name not shown

inside ward 4 February 18, 2019, 9:06 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

My preference would be for Scenario 2 or 3, but not Scenario 4. I do not think it's a good idea to close Ashley, as many people living in the Old West Side use that street to walk to downtown. Also, depending on the layout of the new condos being built on the corner of Ashley and Jefferson, I think many cars might try to cut through their parking lot to get around the street closure.

Name not shown

inside ward 2 February 18, 2019, 9:27 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The noise from the trains is minimal, sporadic, and appropriate for safety. The money would be much better spent addressing the noise from the highways, especially the section of M14 that was closed for over six months and yet the surface was left untreated and is extremely rough and noisy.

Name not shown

inside ward 2 February 18, 2019, 9:47 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 February 18, 2019, 9:51 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 3 February 18, 2019, 11:11 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

People who purchased homes near the train tracks knew what they were in for, and likely paid significantly less for their properties as a result. No need to spend taxpayer money on the special interests of a few people.

Name not shown

inside ward 5 February 18, 2019, 11:29 AM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

I live on the west side in the Upper Water Hill area and LOVE the train horn sound. It is a special part of living in Ann Arbor. A throwback sound that should be preserved and passed on to the next generations. Please, please leave it alone and spend money in other areas. A small, vocal few should not have the power to change and/or silence that beautiful musical sound that puts a smile on my face each time it sounds. New home buyers and current residents were aware of the train horn before moving into the areas near the train tracks. Let it be. Keep Ann Arbor special.

Rob Schultz

inside ward 5 February 18, 2019, 11:30 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We are all responsible for our actions. Nonetheless, bucks and whistles are necessary at train crossings to warn those irresponsible individuals that a train is coming be signals alone apparently aren't good enough to deter them from crossing as the train approaches. This folly of noise abatement at an exorbitant cost is another example of the city acting on the wishes of the few. Those monies could be better spent on safety initiatives elsewhere. What's next, compelling air traffic to be diverted, cancelling siren testing, mutes on all U-M Marching band instruments, a dome for the football stadium? Yes, this proposal sounds *that* absurd.

Name not shown

inside ward 4 February 18, 2019, 12:20 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 18, 2019, 12:52 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Tracy Toepfer

inside ward 5 February 18, 2019, 1:13 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

This is the stupidest, most self-entitled bs I've heard in a long time. I was almost hit by a train that had no signals at the crossing and blew no horns. Sounds dumb until you actually have it happen to you and see the possibility. If I have to pay a penny in tax towards this, I will sell my already over-taxed home and move the "F" out of this increasingly insane town.

Andrew Smith

inside ward 5 February 18, 2019, 2:49 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

I think affordable housing should have more priority than this. Until the noise level changes I recommend ear plugs - better than nothing right? I know proper rest is important since we spend 1/3 of our lives sleeping, but I also know being able to afford a roof over your head probably is more important in the first place. You kinda need a bedroom before you can sleep in it.

Name not shown

inside ward 2 February 18, 2019, 3:08 PM

Quiet Zone Assessment Survey

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I can hear the trains blow their whistles at times.

- 1. I think it is essential for safety when there are not crossing arms.
- 2. I do not believe that the sound is disruptive
- 3. The cost to make the sound unnecessary is too much to put on the Cities capital improvements list and should be ranked as a very low priority if it is put on that wish list.
- 4. We have other very necessary improvements that should take place first

Name not shown

inside ward 5 February 18, 2019, 3:38 PM

Question 1

• Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I take issue with the estimations of costs for the options outlined in the Report. The figures "\$250,000 to \$400,000 per crossing" seem inflated beyond belief and I suspect the cost of generating the Report itself will stagger me. Part of assessing and implementing measures for the health and safety of the public is being conservative with public spending. I wake up with every train horn, and dearly wish to ensure that does not continue to happen, but not at the gargantuan expenses you're proposing. I see no thriftiness in your Report; tossing fistfuls of our money at a problem is not good stewardship.

Name not shown

inside ward 5 February 18, 2019, 4:00 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Dan Levin

inside ward 4 February 18, 2019, 4:19 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Paula Koepke

inside ward 5 February 18, 2019, 6:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 3 February 18, 2019, 7:35 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 18, 2019, 9:03 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

I live far from the tracks now, but lived adjacent to them near the Barton crossing as well two blocks from the William crossing until recently. The trains are frustratingly loud at times, but come by infrequently. I rarely if ever found this disruptive to my sleep and was able to adapt to their presence within weeks of moving nearby. The trains have been there for years, and I accepted that dealing with the noise was my burden when I chose to live in those neighborhoods. I'm sympathetic to the complaints of those who don't like dealing with the noise, but is this not a problem some cheap earplugs can address, rather than millions of dollars that could be spent on other city infrastructure improvements?

Name not shown

inside ward 3 February 18, 2019, 10:42 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I think this kind of money would be better spent on other safety issues, such as better pedestrian crossings. These crossings are safe as long as the trains are allowed to used their horns. "Improved" crossings won't help alert people who are not near the crossings about coming trains. I know people are not supposed to cross the tracks or walk along them, but they do and not allowing horns would actually decrease safety.

Name not shown

inside ward 3 February 18, 2019, 10:45 PM

Question 1

 Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

Phased implementation starting with Scenario 7 (south) would focus improvements and noise reduction in the area that has a higher population density and higher number of train crossings and higher daily traffic, providing much needed noise relief to the most people and additional safety to the most drivers. We live two miles east of the State Street RR crossing (the closest one to our house) and are regularly awakened in the night by the train horn sounding its required four blasts at each intersection as it slowly travels through the city, which often takes

more than 20 minutes. Sometimes the length of each blast is so exaggerated that the cycles become almost continuous.

Name not shown

inside ward 5 February 18, 2019, 10:55 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Train horns: least expensive, least negative impact on the environment! Plus, a re-assuring and cozy tone; what's not to like? Who requested, and who authorized this study? How much did it cost?

Name not shown

inside ward 5 February 19, 2019, 10:06 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I enjoy the train sounds.

Name not shown

inside ward 2 February 19, 2019, 12:17 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Closures or improvements for this issue are much too costly and unnecessary to justify the burden on taxpayers. People and businesses see the railroad crossings when they decide where to reside and that assumes their willingness (not happiness) to accept all that accompanies their chosen location.

Quiet Zone Assessment Survey

Name not shown

inside ward 5 February 19, 2019, 2:17 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

inside ward 4 February 19, 2019, 4:06 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

The trains consistently disrupt sleep and there should be cost effective implementation of a method that will allow residents in the area to get a good night's sleep.

David Adrian

inside ward 5 February 19, 2019, 4:53 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

I don't understand why this is a priority. I'd much rather see this money go towards building housing, rather than making it quieter for the folks who already can afford to live near downtown / Old West Side.

However, if you told me that we could reassess the taxable value of every home affected by the decrease in noise, I'd be all for doing this.

William Hoffmann

inside ward 4 February 19, 2019, 6:30 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I think safety is important and, for a prosperous and growing community like Ann Arbor, is well worth extra expenditure. But I think that regardless of how much it costs the train noise needs to be reduced. That whistle at all hours of the night is ridiculous.

Name not shown

inside ward 1 February 20, 2019, 4:57 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Peter Konigsberg

inside ward 5 February 20, 2019, 6:51 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is an idiotic waste of money. You bought a house next to train tracks, trains make noise. Expecting the city to pay 7 million to make them quiet is childish and rich privilege. How about the city fix the crumbling roads and provide basic service like plowing snow on the city streets. How about staffing the Police and Fire Departments with adequate officers for a city this size. The city council needs to stop kissing rich peoples rear ends and do you job. BASIC CITY SERVICES FIRST AND THEN EXTRA EGO PROJECTS LIKE BAD ART.......

Name not shown

inside ward 1 February 20, 2019, 7:05 AM

Quiet Zone Assessment Survey

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 2 February 20, 2019, 8:57 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

This is absolutely asinine. Rich Ann Arborites are totally ruining this town. If you don't like the train, don't build or buy your million dollar condos by the tracks. DO NOT WASTE CITY MONEY ON THIS GARBAGE. Unbelievable.

Name not shown

inside ward 4 February 20, 2019, 12:55 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

Absolutely no. There are numerous ways that money could be spent to benefit the city and its residents instead of a quiet zone. Part of living in a city (especially near railroad tracks) is dealing with the infrastructure. (And I say this as someone who lived in Depot Town in Ypsilanti, less than 70 feet from the crossing there. I'm well aware of what a train at a crossing sounds like.)

Name not shown

inside ward 5 February 20, 2019, 3:53 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 4 February 21, 2019, 1:17 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Jonathan Cassino

inside ward 5 February 21, 2019, 4:41 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If the city cannot overcome the financial impact on prop A regarding "affordable housing" perhaps we shouldn't be spending money on this dubious project.

Melissa Barnes

inside ward 5 February 21, 2019, 6:25 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

With the horrendous state of our roads, water contamination(s), crumbling infrastructure, the schools having to constantly beg for more

Quiet Zone Assessment Survey

money, the lack of affordable housing, the increase in people on the streets asking for money just to survive, the continuing shrinking tax base thanks to the University of Michigan buying up land and taking it off of the tax rolls - the fact that this ridiculous rich white people non problem is even being discussed is the reason Ann Arbor is such a laughing stock and such an inhospitable place in which to live.

Name not shown

inside ward 5 February 21, 2019, 8:29 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

My house is directly across the street from the tracks. The noise level is acceptable on most days (and nights).

Eric Macks

inside ward 4 February 21, 2019, 9:22 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

If we want to take train transportation seriously in the United States we need to have gates that cannot be driven around at crossings. There are too many crashes at intersections with trains.

Name not shown

inside ward 5 February 22, 2019, 8:46 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This appears to be an issue that is gaining more traction now with

multiple luxury condo and apartment units situated adjacent to the train tracks. I believe this money would be better spent on affordable housing projects.

Saadet Durmaz

inside ward 3 February 22, 2019, 11:27 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 22, 2019, 1:56 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I've acclimated to the trains and find no problem to be solved. Let's move on.

Name not shown

inside ward 5 February 22, 2019, 2:08 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Trains and train noise have been part of this city for a long time. Noise was probably quite a bit more frequent many years ago. The proposals seem very expensive and from my perspective, I don't see the need. When I first moved here, ambient city noises were noticeable due to the newness but now they are just background for me. I use ear plugs if I feel the need. I wonder if those individuals who may have issues don't have

Quiet Zone Assessment Survey

personal options they could adopt rather than a City-wide solution. I don't see a need for very large expenditures for this type of problem, fix the roads or something else of immediate need instead.

Name not shown

inside ward 5 February 22, 2019, 2:37 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We live two blocks from the Jefferson street crossing. We have no problem with the train horns; we have grown accustomed to and like their sound. We do not want our tax dollars spent on this non "national emergency"! If the out-of-our-neighborhood developers, who continue to build luxury boxes next to the tracks, believe this is needed, let them be the ones to pay for the "improvements" and the ongoing maintenance.

Steven Soliman

inside ward 5 February 23, 2019, 10:10 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

The train noise has gotten to the point where one can rarely sleep straight for 4 hours without being awoken by the extremely loud noise of the trains. This effects people daily at work with lack of sleep and I can't imagine the toll this takes on the students and children in the area. For the taxes and housing prices we pay, this is unacceptable. Thank you for your consideration in fixing this.

Name not shown

inside ward 5 February 23, 2019, 1:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Close the Train Crossings at the Intersection of (1) On W. Jefferson between S. Ashley and S. Main Street; (2) Across S. First Street - between W. William & W. Liberty (3) Across W. William between S. Ashley and S. First Street.

Name not shown

inside ward 5 February 24, 2019, 1:18 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Lois Kane

inside ward 5 February 24, 2019, 10:08 AM

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

No response

Bruce Bertram

inside ward 4

February 24, 2019, 12:01 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Crossings are fine as they are. Train noise is not a problem for me, in fact, I love the train noise, a part of the fabric of downtown residency.

Quiet Zone Assessment Survey

Fred Klein

inside ward 5 February 24, 2019, 8:20 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 24, 2019, 11:22 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

I'd like to note the MLive article in which lists high end apartments being built as the only ones impacted felt quite off. Many Ann Arbor residents and businesses are impacted as the train travels right through downtown and honks very loudly at all times of the day. I've lived near the train tracks in N Michigan, Kalamazoo, Chicago and Ann Arbor. This is the farthest I've lived from them and the loudest and most disruptive they have ever been. If we wish to keep growing our community some of the property available to build on is by the tracks, but this is not to appease developers of high end condos, this is to help with the burden on residents/businesses several blocks from any tracks.

Name not shown

inside ward 1 February 25, 2019, 9:41 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

What has staff done to communicate with the train officials about why their whistles have gotten so much louder recently?

Charles Schneider

inside ward 4 February 25, 2019, 2:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 February 25, 2019, 4:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I've lived within earshot for more than 30 years, and have no objections to the train horns.

Name not shown

inside ward 5 February 25, 2019, 7:50 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I love the sound of trains in our community at all times of the day and night. I would very much miss the sounds of the trains in the night if they were banned or restricted. It is part of the character and ambiance of Ann Arbor.

Since our return to Ann Arbor from years of living in San Francisco and on frequent visits over those years - both in winter and summer, the sound of the trains has always been soothing and welcoming, whether we stayed in close proximity to downtown or further out on the West side where we now reside.

Quiet Zone Assessment Survey

Please preserve this essential element of Ann Arbor.

Phillip Dewey

inside ward 4 February 26, 2019, 7:42 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This subtext of this issue is clearly one of convenience rather than safety. As has been said before, "If you don't like it, then move." The trains were there long before most of the residents with complaints and, furthermore, the public perception, which I think is well-founded, is that many of these gripes are coming from residents of the newly minted luxury condos that have sprung up adjacent to the lines. The City of Ann Arbor can spend several million dollars of our tax money in much more meaningful ways that would impact all citizens and not just those who are bothered by living next to the train line. And for the record, I live about a half a mile from one of the crossings.

Name not shown

inside ward 5 February 26, 2019, 10:41 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Every week, I watch cars and pedestrians continue to cross the railroad track on Liberty Street when a train is approaching, well after the lights and bells have started signaling and the train whistle is blaring. We need to have a physical barrier to prevent our citizens from making this bad decision and create a culture of safety.

Brianna Westpfahl

inside ward 4 February 26, 2019, 12:29 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

We can no longer hear the train at night because it wakes up light sleepers/people trying to go back to bed/people trying to sleep

Name not shown

inside ward 5 February 26, 2019, 10:30 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I enjoy the sound of trains late at night. I lived for years within one or two blocks of the tracks downtown and was never bothered. I would object to this misuse of tax dollars.

Scott Kunst

inside ward 5 February 28, 2019, 7:54 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

My wife and I have lived on the 500 block of Third Street for over 30 years. We remember when the trains didn't have to blow their whistles at night, and when the city installed crossing gates on William with flashing lights and clanging sounds which seemed as loud as the train whistles.

In the last year or so, the whistles have sounded louder than ever, and I am all in favor of a quiet zone. The difference between the highest and lowest cost estimates doesn't seem that much in the grand scheme of things, so I'm in favor of doing whatever will best (1) protect current residents and (2) encourage the continued development of housing in central Ann Arbor.

If we were talking about chemical pollution rather than noise pollution, I don't think many people would be arguing that we should allow it to continue because it smells good to them or blame the new people who want to live in the area for being overly sensitive. I think \$7 million for a quiet zone is a good investment in a healthy, vibrant, and growing downtown, and that's good for the whole city.

Quiet Zone Assessment Survey

Karen Hart

inside ward 5 February 28, 2019, 1:56 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I am currrently opposed to street/crossing closures because of the impact on traffic, and I am reluctant to commit to gates, given the potential increased backing up of stopped traffic. We have had no crashes in the past 5 years (probably longer than that), and the only other quality of life issue is horn sounds, which -- while heard across the city -- are not a problem, in my opinion. If the citizens of this city are not yet ready to commit to vastly increased train traffic, which they do not seem to be, then I believe this huge expense is not justified. If people wake up and get behind commuter and high-speed trains and major multi-modal train stations, then, and only then, do I think this expense is justified.

Name not shown

inside ward 5 February 28, 2019, 2:19 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 2 March 1, 2019, 2:04 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

At this time I recommend no further investment, but that is primarily because I don't quite see any issues with train-horn noise -- would it be possible for reports to state problems very clearly in the beginning? This

is coming from a citizen whose area of expertise is not train-horn noise, AKA someone who wouldn't know if there are actual issues caused by train horns worth finding a solution for.

Michael Harrigan

inside ward 1 March 1, 2019, 5:41 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

We have lived with the Traver crossing for 41 years. A small update grade to lights and bells would be a good improvement. Better yet upgrade Traver BLVD to a dedicated, fully paved road all the way through Leslie Golf Course.

Name not shown

inside ward 5 March 2, 2019, 6:25 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I strongly urge implementation of a quiet zone, particularly for the Water Hill and Old West Side neighborhoods.

Judy Truckey

inside ward 1 March 2, 2019, 7:37 AM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

I hear the trains several times each day but I do not consider the issue important enough to put dollars towards it.

Quiet Zone Assessment Survey

Name not shown

inside ward 5 March 2, 2019, 3:28 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Public safety should be the highest priority, and scenario 5 provides the best public safety option. It would allow Ann Arbor to transform its crossings from archaic and outdated to state of the art.

Nate Phipps

inside ward 5 March 2, 2019, 4:11 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Robert LaJeunesse

inside ward 2 March 3, 2019, 7:00 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

This is an unfair survey, grouping scenarios 2,3, and 4 together as one choice. Frankly, if this is implemented anything other than scenario 3 is certainly wasted money.

Jennifer German

inside ward 4 March 4, 2019, 1:38 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Secnario 2 is okay also if need to save some money. I don't think a phased implementation is a good idea, too much opportunity for things to fall out of sync or drag on way too long, costing more money. I'm on the fence about road closures. I am VERY happy to see action being taken to reduce the train horn noise! I'm tired of and annoyed with being woken up at random times before 7am on Saturday mornings by train horns that then continue sounding for 5 to 10 minutes.

Name not shown

inside ward 5 March 4, 2019, 3:25 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Adam Emerson

inside ward 5 March 5, 2019, 11:53 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 5, 2019, 11:53 AM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

No response

Name not shown

inside ward 5 March 5, 2019, 4:23 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 March 5, 2019, 4:52 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

KAREN SANDERS

inside ward 2 March 5, 2019, 6:59 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

inside ward 2 March 5, 2019, 7:51 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

- 1. Complaining about train noise is like complaining about airport noise; it was there long before you moved in.
- 2. How much train traffic is there on the Ann Arbor line? I live on the NE side, drive Plymouth Road daily, and rarely see trains.
- 3. What is Ann Arbor's rate of train fatalities in the last 50 years.
- 4. Are we, as a society, responsible for the person insistent on driving around a RR crossing gate?

Please do not build medians. Fix roads instead. Dodging potholes is more dangerous daily experience for everyone.

Name not shown

inside ward 5 March 6, 2019, 5:12 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

These trains have been around forever. Once you live here for awhile, you don't hear them anymore. I consider this a waste of money.

Name not shown

inside ward 1 March 8, 2019, 7:57 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Ouestion 2

This is an awful idea. Why would we spend this much of our community money because some people didnt do any critical thinking about living next to a railroad rack before buying their condo? This is a problem with no merit that should not take funding from other parts of the city infrastructure that are in need. Dioxane plume water contamination anyone?

Anna Foster

Quiet Zone Assessment Survey

inside ward 5 March 8, 2019, 1:48 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I would rather spend the same dollar amount on many other projects (like affordable housing).

Joshua Sweenev

outside wards March 8, 2019, 1:56 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There are many other safety concerns within the community that are much more important that could use that money such as affordable housing, road repairs or improvements to public transportation.

Terryl Sperlich

inside ward 5 March 8, 2019, 2:28 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We need affordable housing more than this

Name not shown

inside ward 4 March 8, 2019, 4:25 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Please find a better place to spend this money - I've lived near train tracks for almost the entire 16 years I've lived in Ann Arbor, and have never had a problem with the noise.

Name not shown

inside ward 5 March 8, 2019, 4:48 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

It's ludicrous to spend so much of our budget on this.

Ersyla Nellajoy

inside ward 5 March 8, 2019, 6:05 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I've grown up in Ann Arbor and The train noises was never a problem. It is not a problem Now. I can think of better things to spend Ann Arbor's money on Like how about affordable co housing units

Laurie Carpenter

inside ward 5 March 8, 2019, 6:12 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

No response

Name not shown

inside ward 3 March 8, 2019, 7:47 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I'd rather invest in ways to allow active transportation to safely cross tracks at opportune locations otherwise prohibited than throw money where active train lines have been present and annoy some residents...

Name not shown

inside ward 5 March 9, 2019, 1:52 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 9, 2019, 2:21 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This money could go towards SO MANY OTHER THINGS.

Name not shown

inside ward 5 March 9, 2019, 2:48 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I want affordable housing.

Name not shown

inside ward 4 March 9, 2019, 2:55 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I believe this funding would benefit the city more if used for affordable housing.

Name not shown

outside wards March 9, 2019, 5:07 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This money should go towards affordable housing.

Name not shown

inside ward 5 March 9, 2019, 6:18 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Let's spend money on needed things like road repairs and affordable

Quiet Zone Assessment Survey

housing.

Name not shown

inside ward 1 March 9, 2019, 10:13 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 10, 2019, 12:25 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

France Martin

inside ward 5 March 10, 2019, 1:41 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Nancy Goldstein

inside ward 5 March 11, 2019, 8:28 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

The City should have a public meeting on this assessment. We need better understanding and conversation, or these scenarios will fail. In that case, our only option could be mitigating train horn noise. We should have scientific measurement of the actual decibel level of the AARR train horns; and we should hear about results from other cities with train horn improvements. This can still be done.

Laurence Goldstein

inside ward 5 March 11, 2019, 9:32 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 3 March 11, 2019, 11:06 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Maybe \$2-7 million could just be put toward affordable housing instead. That seems much more important.

Name not shown

inside ward 4 March 11, 2019, 11:43 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

I can hear the train noises from my house at 2 AM. It is occasional and not a huge deal. I'd prefer the money to be used to fix roads or something.

Name not shown

inside ward 4 March 11, 2019, 5:22 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

This money could be used for many other, more important, issues.

Name not shown

inside ward 3 March 11, 2019, 9:28 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Niklas Mackler

inside ward 3 March 12, 2019, 6:55 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I live a mile away and in the spring/summer I am often frustrated by the noise of the trains in the early hours

cathryn amidei

inside ward 5 March 12, 2019, 8:54 AM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

We should think forward to more trains and better connections via rail.

Name not shown

inside ward 4 March 12, 2019, 8:56 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The train has been here for over 100 years and I am concerned that people moved here knowing that the train runs through their neighborhood and now want to complain about it. I would support some changes in a few train crossings that I feel are not as safe as they could be. I do think that crossing signals and Main street, Liberty and Hill Street would be appropriate for safety reasons, but only because there is a heavy traffic load on those crossings and I have seen drivers ignore the flashing lights.

Name not shown

inside ward 2 March 12, 2019, 9:01 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I believe the cost should largely be borne by the properties/residents impacted by the noise, and therefore wouldn't support changes until that point is addressed.

Eli Bilek

inside ward 1 March 12, 2019, 9:20 AM

Quiet Zone Assessment Survey

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

Starting with North phased implementation will allow the city to evaluate whether actual costs match expected costs, and evaluate further before committing to a city-wide plan. None of the options make the crossings "dangerous" or less safe than average or than is acceptable, so the priority should be keeping costs down rather than maximizing the safety ratings.

Name not shown

inside ward 1 March 12, 2019, 9:24 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live on Ashley St and can see the train from my windows. The noise does not bother me and rarely wakes me. The assessment notes that there have been no crashes in the past 5 years at any crossing in under consideration for added safety measures. I knew the train was there when I purchased and so should the others who live near the tracks. The city should focus its attention and direct resources to ensuring safe drinking water and the dioxane plume because it will present a much greater safety and health risk for every Ann Arbor resident then train horns that are a bother to a few.

Name not shown

inside ward 3 March 12, 2019, 9:32 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

The train noise during the night is unbearable at times. it seems like a lot people so far answered this survey with "I accept train noise" - however, it'd be interesting to know whether those people live anywhere even close to the tracks. We live about a mile away from the crossings and at times can hear multiple trains during the night. I can't even imagine what it's like for people who live downtown or on the old west side.

Name not shown

inside ward 3 March 12, 2019, 9:43 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 12, 2019, 10:11 AM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

IF the gates and signals could be upgraded right away with phasing in the highest safety options (if that would save money), that would be great. For the Summit Street crossing, I do not favor the "exclude from Quiet Zone" if that means that trains will still be blowing horns as they approach the Summit Street crossing.

Name not shown

inside ward 5 March 12, 2019, 10:15 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 3 March 12, 2019, 10:18 AM

Quiet Zone Assessment Survey

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 5 March 12, 2019, 10:49 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 12, 2019, 11:27 AM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

I don't believe the entire city should pay for what benefits a wealthy few who live on the old west side. The train was there when they moved in. They knew what they were getting into.

If we decided to create a Quiet Zone what would happen to property values in the area? I think this is a few people trying to greatly increase the value of their property at the expense of the rest of us.

Name not shown

inside ward 3 March 12, 2019, 12:30 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 2 March 12, 2019, 12:47 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I am awakened at least 3 or 4 nights a week by the blast of these horns, and am generally unable to get back to sleep. The constant fatigue is debilitating. This is the first glimmer of hope I have seen, and I hope that there is some way that the outcome of this process will be a Quiet Zone. This is undoubtedly a health issue.

Cynthia Gerlein-Safdi

inside ward 5 March 12, 2019, 1:07 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

As a resident of the Old West Side neighborhood, a regular biker, and the parent a young child, I am in favor of 1) improving Ann Arbor's crossing to qualify for a quiet zone and remove the need for train horn and 2) provide the safest possible gates, signals, and road upgrades at each crossing in order to provide a safe environment for all road users.

Name not shown

inside ward 5 March 12, 2019, 1:30 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

I live less than a tenth of a mile away from the tracks, and only slightly farther from an at-grade crossing. A once-a-day train is neither overly disruptive nor impacting of sleep for any adults or children in our household. If we had higher frequency, I might feel different. But as it is, I do not feel it is a good use of funds.

Name not shown

inside ward 5 March 12, 2019, 1:34 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Angelina Zaytsev

inside ward 5 March 12, 2019, 1:51 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Daniel Salamone

inside ward 2 March 12, 2019, 1:59 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Please do not waste a single penny of money on any of this. Fix the roads. Create affordable housing. Make AATA more robust.

Aaron Elkiss

inside ward 1 March 12, 2019, 2:00 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live on Pontiac Trail within earshot of both the MDOT/Amtrak and Ann Arbor Railroad tracks. I do not mind the train horn noise and would not want to spend taxpayer money on this issue.

Name not shown

inside ward 2 March 12, 2019, 2:11 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Michael Smith

inside ward 5 March 12, 2019, 2:24 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

We have lived on 2ND Street for 35 years. When we moved here the trains did not sound their horns throughout the night. It is very disruptive.

Rollin Baker

inside ward 1 March 12, 2019, 2:28 PM

Quiet Zone Assessment Survey

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 5 March 12, 2019, 2:28 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Living at Davis and Hutchins and working at Hill and Greene right beside the tracks, the train horn noise has never been a problem for me.

Josh Tishhouse

inside ward 3 March 12, 2019, 2:29 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Name not shown

inside ward 5 March 12, 2019, 2:34 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Once this line is changed in to the Ann Arbor to Traverse City commuter rail (A2TC), we'll have nothing to worry about. Even if that doesn't happen we don't know the long term viability of the Great Lakes Central or Watco

with respect to these existing lines.

This certainly doesn't seem to be a safety issue as I've not heard of any injuries that the flashing lights and bells haven't prevented, even in an age of distracted drivers. If you are so distracted as to ignore flashing lights and bells and run into a train... well, I don't know what to tell you.

I think we can better spend our money on other improvements than to eliminate train horns at a cost of \$60 to every man woman and child in the city. I live a lot closer to the train than many of those complaining and it hasn't bothered me. I recognize there are many other factors, that might make me less susceptible to the noise or that might make the noise measurably worse in locations further than my home. But if you are sitting 'bolt' straight up in the middle of the night due to this noise, you have to be soundly in the minority.

Name not shown

outside wards March 12, 2019, 2:55 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

If the people living along the railroad would like to pool the \$7 million to cover the costs of the upgrade that's fine, but I refuse to pay taxes to keep the train quiet. These people knew they were buying a house next to the tracks. It is the sole reason the houses they bought were affordable. You don't buy a house that is next to the tracks and expect everyone else to foot the bill to make your life more peaceful. These people should move somewhere quieter if they don't like it. We throw enough money toward ridiculous and useless things.

Andrea Darden

inside ward 2 March 12, 2019, 2:59 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Quiet Zone Assessment Survey

Name not shown

inside ward 3 March 12, 2019, 3:01 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Amy Thomas

inside ward 4 March 12, 2019, 3:29 PM

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I think this is important and will only cost more down the road.

Name not shown

inside ward 5 March 12, 2019, 3:46 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The Old Westside is full of entitled rich people. They want to buy a house for \$1M + and then ahve the city foot the bill for the improvements - of something that was ALREADY there. Don't buy a house next to the tracks and then hope the rest of the city pays for the improvements. Spend the money on affordable housing.

Name not shown

inside ward 1 March 12, 2019, 3:49 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Name not shown

inside ward 1 March 12, 2019, 4:08 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I live on Charles St and can't sleep with the windows open in the summer because the train wakes me up multiple times per night. It's not just one whistle - I can hear it for 20 minutes nonstop as it moves through Ann Arbor. The noise pollution from the train degrades quality of life in Ann Arbor.

I would pay any amount in increased taxes for a quiet zone.

Name not shown

inside ward 5 March 12, 2019, 4:45 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I lived on First and Williams for 3 years starting in 2001. I have always like the sound of the train, it's part of the city. I'm not a fan of spending money on this issue. I feel there are better things the city could do with the money.

Dante Amidei

inside ward 5 March 12, 2019, 4:47 PM

Quiet Zone Assessment Survey

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I find the limited choice of options here to be unacceptable. I do not accept the impact of train noise, and I don't understand why the scenarios do not involve train company. Why is this entirely the City's responsibility.? The train is a considerable perturbation on the routine of the city, it interrupts motor and foot traffic, it makes noise, it spews smoke. Does the train company owe anything to the city in exchange for this? Maybe there is some legal background I do not know, like the train company pays taxes to the city? or the owner of the rail-lines has immunity in perpetua,? but there is no information in the report on this. In the absence of this understanding, my proposal is this: if the train company wants to pass through the city, they can pay for the safety upgrades. If they do not want to pay for the safety upgrades, they can find another route that does not pass through our city.

John Beeson

inside ward 5 March 12, 2019, 4:50 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I am okay with closures at Bowen street, but not Ashely. Ashley is part of the downtown fabric and this is crucial in flow and community feel.

Signal upgrades seem necessary, but it's amazing to me that a signal upgrade would cost that much.

Name not shown

inside ward 5 March 12, 2019, 6:11 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

It is a shame that the RR administration seems to require so many horn $% \left\{ \mathbf{R}^{\prime}\right\} =\left\{ \mathbf{R$

blasts. Perhaps a variance could be obtained, or wait a few years and the rules may change back again.

Name not shown

inside ward 5 March 12, 2019, 6:18 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live right next to train tracks and, like everyone else, knew they were there when I purchased my property. This seems like an irresponsible use of funds.

Name not shown

inside ward 5 March 12, 2019, 6:54 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is an absolute waste of money thay could be better used pedestruan safety, buffered bike lanes, fixing the roads, etc...etc...we have much larger problems!!!

Name not shown

inside ward 3 March 12, 2019, 7:07 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

The city spends a fortune on UofM sports events unrecompensated in whole by UofM, yet apparently a huge number of people would spend nothing on house owners to alleviate a real problem.

I will vote against any elected official who support not ameliorating this problem.

Quiet Zone Assessment Survey

Name not shown

inside ward 5 March 12, 2019, 7:53 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Ellen Copeland

inside ward 1 March 12, 2019, 7:59 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

It has been safe there has been no fatalities it is not a safety issue no concern that would warrant this cost

Eugenia Copeland

inside ward 1 March 12, 2019, 8:21 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

No improvement necessary, there is very limited noise and limited to no safety issues. Additionally, the proposed modifications will be more disruptive than an enhancement.

Name not shown

inside ward 5 March 12, 2019, 8:22 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

James Delproposto

inside ward 4 March 12, 2019, 8:47 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Although the noise doesn't bother me because I live far enough away, I think it would substantially improve the city. I am disappointed that I only heard about this survey on NPR a few days before it closed.

Kim Hill

inside ward 1 March 12, 2019, 8:55 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Seems like a lot of money to mitigate noise. If you moved to a house near the tracks, accept the train noise, or move. Don't ask the rest of the city to take care of your problem/issue.

Matthew Healy

inside ward 5 March 12, 2019, 8:59 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

I think if scenario 1 allows us to implement a quiet zone, then that is what

Quiet Zone Assessment Survey

should be done as it minimally impacts traffic, and also reduces the cost to tax payers (especially those who live outside of the audible areas of the rail line).

Upgrades to get us below the RIWH in the future, as costs allow, or if needed to maintain the quiet zone.

Michael DeLauter

inside ward 4 March 12, 2019, 9:26 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

train noise doesn't bother me and I feel like the money would be better spent on road maintenance or our looming water problem.

Name not shown

inside ward 5 March 12, 2019, 9:39 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

This is something that affects a significant portion of downtown Ann Arbor and it's residents. You don't have to live next to the tracks to be woken up in the middle of the night by the blaring sound of the horn. People can hear it for miles. Don't make people choose between a good night's sleep and living in beautiful downtown Ann Arbor.

Name not shown

inside ward 2 March 12, 2019, 10:01 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 12, 2019, 10:19 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Spend the money on potholes

Name not shown

inside ward 5 March 12, 2019, 11:25 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Daniel Elpi

inside ward 4 March 13, 2019, 12:55 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Train sounds give us a sense that there are things happening around us even when we do not seem to be aware of them. Train noise is part of the city soundscape.

Name not shown

inside ward 5 March 13, 2019, 5:20 AM

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 March 13, 2019, 6:09 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

Worries about the "cultural significance" of the train horn are nonsense.

Name not shown

inside ward 4 March 13, 2019, 6:30 AM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

I don't think money should be spent on this. The train horns have been a part of the ambience of Ann Arbor for decades and decades. White noise machines would do wonders for people whose sleep is interrupted. I find it hard to believe folks didn't know that trains make noise when they moved into their homes in closer proximity to train crossings.

Name not shown

inside ward 4 March 13, 2019, 8:08 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

The railroad has a long history in Ann Arbor and has in fact been an important part of its development as a city in the 19th century forward. The rail noise is and always has been an aspect of living in Ann Arbor and is an urban noise that comes with living in a city. The city has much bigger priorities for the limited funds we have available to address them all. Any money Ann Arbor has should go to shore up our legacy costs of pension and healthcare for employees and go to improving roads and services in the city that are not being performed at expected levels (park and median upkeep is woeful with many branches and overgrown sections in medians and parks).

Name not shown

inside ward 4 March 13, 2019, 8:32 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I love the sound of the trains. I'm curious as to why people choose to live in a city, yet are adverse to noise (highway, train, etc.)?

Name not shown

inside ward 1 March 13, 2019, 9:10 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

The overwhelming concern is the night time crossing and the sound of the horns to the sleeping residents. So, the city should also take into account the number of households affected at each of the crossing.

Name not shown

inside ward 1 March 13, 2019, 10:30 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Quiet Zone Assessment Survey

Question 2

No response

Name not shown

inside ward 5 March 13, 2019, 10:45 AM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I have lived just a few blocks from the Annie for nearly 25 years, and on and off before that. I LOVE the sound of the train horns. However, a number of my neighbors really suffer from the noise. So I am voting for relative minimum implementation phased in over time.

Deanne Neiburger

inside ward 1 March 13, 2019, 10:50 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I have lived one block from a grade crossing for 20 years now, and am completely against investing money for a quiet zone. I am sorry some new homeowners did not research their location before investing, but I do not see that this issue is impacting the community in a way that would justify the costs. This money would be much better spent on affordable housing-an issue affecting quality of life much more significantly than the train horn, which has been here much longer than any of us.

Name not shown

inside ward 5 March 13, 2019, 10:59 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I'm happy with or without closures, maximizing safety with the improvements.

Name not shown

inside ward 5 March 13, 2019, 11:09 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Jeff Spindler

inside ward 5 March 13, 2019, 11:12 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

This survey might have been better with ranked voting.

Name not shown

inside ward 3 March 13, 2019, 11:20 AM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Kurt Sonen

inside ward 2 March 13, 2019, 11:21 AM

Quiet Zone Assessment Survey

 Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation loud enough to awaken us all the way up by Mack School. Visiting family has been bothered by the train noise when staying at hotels/inns near downtown Ann Arbor.

Question 2

No response

Greg Davis-Kean

inside ward 1 March 13, 2019, 11:24 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I'm happy with any solution that eliminates the noise at West Summit. I would have preferred a simpler yes/no survey. e.g. "should we spend 7M or more to increase safety and reduce train noise?" Then let the experts pick how best to achieve that.

Name not shown

inside ward 5 March 13, 2019, 11:27 AM

Question 1

 Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 5 March 13, 2019, 11:30 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

It does seem worthwhile to create a quiet zone. The horns have become louder in recent years. Recently the train noise at night has at times been

Name not shown

inside ward 1 March 13, 2019, 11:46 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is absurd given the other problems with our roads and water.

Elisabeth Close

inside ward 5 March 13, 2019, 11:49 AM

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

This measure will clearly improve public safety as well as quality of life/mental health for those living close to the tracks. Waiting for an accident to occur before taking action to improve safety and come up to speed with implemenations of other similar cities is inappropriate. Additionally, the increased noise from the trains at night does affect sleep and health for those in proximity. Please show empathy towards those who are significantly affected, and vote to increase safety and well-being of our entire community.

Name not shown

inside ward 1 March 13, 2019, 11:52 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

I live within 2 blocks of the tracks and don't even hear it anymore...i find the thought of spending millions of dollars to do this to be ridiculous and a waste of very needed money for affordable housing and such services.

Name not shown

inside ward 4 March 13, 2019, 11:58 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Molly Ging

inside ward 1 March 13, 2019, 12:10 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 March 13, 2019, 12:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I think our dollars can be better spent helping the city solve real issues and problems for the entire city and not just a select few citizens who live close enough to the tracks to be bothered by the sound. Your study did not indicate how many people within the city are affected by the sound (I do live next to the tracks myself) nor how much our taxes will increase due to the improvements.

jon gustafson

inside ward 5 March 13, 2019, 12:34 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 March 13, 2019, 12:55 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 1 March 13, 2019, 1:28 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Our city has many needs, and slightly improving the relative comfort of a handful of condo dwellers and folks who knew they were buying living quarters near the tracks should be at the bottom of the list. If I had to choose, I would spend to signalize the two places where folks regularly cross the tracks, at Lakeshore and at Bandameer on the B2 B trail instaed of an expensive tunnel

Caitlyn Buchanan

inside ward 5 March 13, 2019, 1:43 PM

Quiet Zone Assessment Survey

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

No response

Mary Underwood

inside ward 1 March 13, 2019, 2:04 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The 'investment' on my street, Traver near Bowen, would require gates and signals (just as noisy as whistles) and closure of thru traffic on Traver. This would be a senseless imposition for a safety problem that does not exist. As for noise? When you buy a place near a RR crossing, you may expect to hear a train and whistle Duh. There are actually people who love trains and who would pay any price to live where I do -- one house away from the tracks and crossing. Can't you invest time and money in a more meaningful way????? Come on. It's like the road commission removing trees because someone may not know how to drive and run into one. What's wrong with our view of our world?!!!!!!!

Name not shown

inside ward 4 March 13, 2019, 2:12 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 13, 2019, 2:41 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

Our roads are crumbling. Why should we waste \$5million to \$8 million dollars on this, when we could instead spend it on repairing the roads? I live on Washington a few blocks from the YMCA so I hear the train whistles. I am much more bothered by the fact that Washington Street is crumbling - it has giant pot holes with the potential to screw up my car's alignment or axles.

Name not shown

inside ward 1 March 13, 2019, 2:43 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I think this would be a waste of taxpayers' money. Would rather see the money spent on road repair.

Name not shown

inside ward 5 March 13, 2019, 3:34 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Nancy Hart

inside ward 1 March 13, 2019, 3:54 PM

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I love the sound of trains. I'd rather see any available monies be spent on repairing our dreadful roads.

Name not shown

inside ward 1 March 13, 2019, 6:12 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is ridiculous. Train horns are a part of living in a vibrant city. Move to the country if people don't like them. It is a waste of time and money. Spend the money on more urgent issues such as affordable housing, roads.

Jill Johnson

inside ward 5 March 13, 2019, 6:33 PM

Question 1

• Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

Since I bought my house in 1987, I have not been able to sleep with the windows open in the summer because of the trains. Even with them closed, I have resorted to running a fan for "white noise" year round in order to sleep. And ear plugs. I would dearly love to have the horns stop!

Name not shown

inside ward 1 March 13, 2019, 8:14 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We need this money for far more important things than this. Train noise is part of city living.

Julia Blough

inside ward 5 March 13, 2019, 8:51 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

Train horns are a familiar and comforting sound.

Name not shown

inside ward 1 March 13, 2019, 9:29 PM

Ouestion 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Sharon Herrera

inside ward 1 March 13, 2019, 9:49 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 5 March 13, 2019, 10:57 PM

Quiet Zone Assessment Survey

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I like the sound of train horns - even when I lived on 1st street right behind Fingerle and associated night unloadings. Not an unpleasant noise, and easily gotten used to!

Name not shown

inside ward 3 March 13, 2019, 11:10 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 March 13, 2019, 11:24 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Matthew Jones

inside ward 5 March 14, 2019, 7:42 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Just about any expense to solve this problem amounts to subsidies for

developers who insist on building \$750,000 condos right on the tracks. This is a non-problem. For that kind of money, we need to be solving real problems.

Ryan Burns

inside ward 1 March 14, 2019, 9:46 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I think this is a lot of money to spend and I actually like hearing the train horn in the distance.

Erin Behrmann

inside ward 4 March 14, 2019, 11:15 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is a waste of money and not needed. The current situation meets safety standards. Residents who live near crossings understood that there would be train noise when the home was purchased. I used to live at the Hill crossing (on Brown street) and you get used to the noise. This isn't a one time investment of millions, it is an investment of millions in maintenance over the lifetime of these systems. And those gates with ringing bells, not that much quieter and they malfunction all the time. Stop letting a small group of residents with special interests make expensive decisions the whole city has to live with.

Name not shown

inside ward 4 March 14, 2019, 12:00 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Quiet Zone Assessment Survey

Question 2

No response

Name not shown

inside ward 1 March 14, 2019, 12:08 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I really don't see train noise as any issue. I was aware of it when I purchased my home and am ok hearing it. There are better ways to spend money.

Name not shown

inside ward 5 March 14, 2019, 12:33 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live on the West Side and can hear the trains. I knew this when I moved here. I do not mind the noise and am not interested in paying for the upgrade. I am fine if those who are bothered want to raise the money to do it, but not with my tax dollars or a contribution from me.

Name not shown

inside ward 4 March 14, 2019, 12:54 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

As people who actively choose to live in vibrant city, we must accept that there will be noises. Barring a real threat to safety, I see no reason to

waste funds on these upgrades.

Name not shown

inside ward 1 March 14, 2019, 1:00 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Ouestion 2

No response

Name not shown

inside ward 5 March 14, 2019, 1:01 PM

Question 1

• Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I prefer Scenario 3. I live about a mile from the downtown train tracks and am routinely woken by the horns overnight despite wearing earplugs, so I would welcome a policy or action to reduce or eliminate that noise between 10pm-6am. I also think that improving safety for vehicles and pedestrians is important. That said, clean drinking water is my highest priority for the city, followed by road maintenance, and I would not pursue this before those.

Name not shown

inside ward 1 March 14, 2019, 1:04 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

The horn noise is out of control and adversely impacts many peoples' quality of life.

Quiet Zone Assessment Survey

Name not shown

inside ward 5 March 14, 2019, 1:16 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 14, 2019, 1:28 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Kirsten Weis

inside ward 4 March 14, 2019, 1:30 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 4 March 14, 2019, 1:35 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 3 March 14, 2019, 1:36 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

I'm strongly against all of these changes. The folks involved are among the wealthiest of this city and knew those manors were next to train crossings when they bought them. They aren't forced to live there because of economic deprivation. I do not feel the rest of us should have to help pay these large costs, nor be impacted by the disruption of traffic for this issue. The horn of a train may be loud but it is short and not unpleasant, I predict the warning bell added to the crossings will be much more unpleasant than the train's horn. I grew up half a block from a train crossing. Horns blew at all times of day and night, but they did not wake babies from naps, nor adults from their sleep. I deeply believe this is not an issue of importance for the city of Ann Arbor.

Name not shown

inside ward 5 March 14, 2019, 1:45 PM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

I think we need to get this done. While it impacts local neighbors the most, it matters to all of us. I'm not anywhere near a train track and I wake up at night, too! That said, I would like to suggest choosing the most cost effective option, as our taxes are already really high.

Name not shown

inside ward 4 March 14, 2019, 2:26 PM

Question 1

Quiet Zone Assessment Survey

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The horns have been there since 1950 or before. They are part of Ann Arbor.

Mike Mitchell

inside ward 5 March 14, 2019, 2:30 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 14, 2019, 2:50 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

Train noise is normal. It is part of our society that has transportation and trade. If you move near the noise you are accepting the noise. Just like accepting to live near a freeway or nightclub. Maybe it will make some neighborhoods actually more affordable. If people don't like the noise they can always move.

Name not shown

inside ward 1 March 14, 2019, 4:17 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Horrible roads. Gelman plume. Lack of affordable housing. Homelessness. And the city puts out a survey on...

Train whistles. Sweet mercy - who dreams this stuff up? They should be fired. How about putting some muscle behind clean water and places for people to live? The dioxane plume has been spreading for years while the city puts up with continual blather of well testing rather than taking action to enforce clean up to abate the mess; headlines rivaling Flint on on our horizon. Add that to our crappy roads, the tired and dirty look of the street scene, with increased panhandlers and garbage littering everywhere.

And yet, our city "experts" want to commission studies on train whistles and how to add a tenth of a mile of bike lane here and there. I think the Transportation department needs new leadership, fewer engineers and more road crews. Thanks for asking.

Name not shown

inside ward 1 March 14, 2019, 4:24 PM

Question 1

• I accept the impact of train horn noise and recommend no further investment.

Question 2

Spending money on train horn noise is not a priority for our family.

Name not shown

inside ward 5 March 14, 2019, 4:24 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Ouestion 2

I'm concerned with the idea of spending any additional money on this issue. When we are told by the city that there are no resources available for the many, more pressing and frequently voiced, concerns, action on such a niche issue feels like a slap in the face.

Name not shown

Quiet Zone Assessment Survey

March 14, 2019, 5:38 PM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

You bought a house near a rail line, you bought a house near a train why am I paying for your choice?

Name not shown

inside ward 2 March 14, 2019, 5:43 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Peter McIsaac

inside ward 5 March 14, 2019, 5:45 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I live close enough to the tracks to be constantly bothered by train horns and am also extremely concerned about the current safety of the crossing in Ann Arbor. This investment is necessary to improve the quality of life in Ann Arbor

Adrienne Kaplan

inside ward 2 March 14, 2019, 5:47 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Forget the train "sounds." Don't spend our city tax dollars there when our streets are crumbling. FIX THE CITY SREETS.

Name not shown

inside ward 5 March 14, 2019, 5:49 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 3 March 14, 2019, 6:02 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 March 14, 2019, 6:29 PM

Question 1

• Scenario 5: Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Naomi Daniel Oorbeck

Quiet Zone Assessment Survey

inside ward 5 March 14, 2019, 6:31 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Somayeh Molaei

inside ward 5 March 14, 2019, 8:34 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

Ann Arbor is a growing city. Although I live a few blocks away I clearly can hear the train and it shakes the house every time. Even if you postpone it for the people in the future to do it, it will be affecting the same people that it is now, at least the same number of people. Lots of people who don't support the quiet zone, they don't live close enough and they're not affected by the train to feel the harm. Thus, their objection to the quiet zone must have less weight in your analysis. As an Ann Arbor resident the least you can ask for is to not wake up to the insanely loud sound of an old freight train in the middle of the night after a long work day to make this city great, to make this country great! Is this to much to ask?!?

Nick Onkow

inside ward 5 March 14, 2019, 8:43 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

First off, as you well know, the survey is naturally flawed and the results heavily skewed to favor no action because most of A2 does not live close enough to the train to be woken up by it. If there were a way to survey those who live within a 100 yard parallel corridor on either side of the tracks, we'd obviously see a significant change in the data to favor noise reduction.

Secondly, most replies against the quiet zone mention things completely unrelated to the train noise such as "fix the roads" or "put the money towards schools" or some other idea. These items, while arguably needed in their own right, are irrelevant to the discussion of the quiet zone.

I voted for Scenario 5 but I would also be happy seeing #1, 2, 3, 4, 6, 7 occur as it's not a binary choice and there are of course options to start with a few crossings near downtown and go out from there later on.

I travel all over the country regularly and I'm reminded of some other successful quiet zones that I've walked through. Tampa and San Diego come to mind. Having been to them and many others since this A2 quiet zone discussion began, I have to laugh at the thought of NOT having a quiet zone established as a city grows over the years. More people are living near the train tracks than ever -- as Ann Arbor grows from the village it once was to a larger city gradually over the years, a quiet zone is just one of the many things that come with a being a larger city.

There are some who make the argument, "They should have thought of this before they moved in!" True, the train track was present and has been for a long time. But when presented with this one time expense that will last thirty years and reduce noise 365 nights a year, it is a no-brainer. This MUST become a quiet zone.

Although I don't live quite near enough to the tracks to be woken up by the train, I do live close enough to hear it if I am already awake, which I often am for the first [northbound] pass through downtown. Despite the naysayers, I must agree with those who say that the horn last year was noticeably louder than years past. Blame cannot be placed on the railroad or any of its employees because they are merely following procedures and would carry a heavy liability for not doing so in the event of someone being hit by the train.

In closing, I think a lot of 'everyday citizens' see the cost numbers on here and, as many of their comments show, become very adamant at the supposed total waste of money. Realistically though, when shown as part of the total city budget, and considering the fact that this up front cost will last several decades, this is spare change. Additionally, the new buildings near the tracks with many apartments literally at the tracks, are paying the city significantly more tax revenue than the things that were previously located there. Therefore, additional money is coming from those who are most bothered by the train, which I believe cancels out much of the argument about not building condos and apartments near the tracks because of the tracks. That is absurd; should the tracks be surrounded by open fields on both sides rather than establish a modern quiet zone? Of course not.

I saw no strong argument from any no-voters after scrolling through many replies. All one-liners about fixing potholes and moving near trains. I think we all know what the right thing to do is -- and it's not "nothing."

Quiet Zone Assessment Survey

Name not shown

inside ward 5 March 14, 2019, 8:54 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I love the sound of a train's horn.

Robin Grosshuesch

inside ward 5 March 14, 2019, 10:03 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 14, 2019, 10:24 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

I can hear the train from my home on the Old West Side and can a little while longer, so as not to blow the budget.

Name not shown

inside ward 5 March 14, 2019, 10:46 PM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

I actually will be happy with anything that stops the train horns.

Name not shown

inside ward 5 March 14, 2019, 11:26 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No accidents in five years indicates that current designs are adequate.

Name not shown

inside ward 5 March 15, 2019, 12:14 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 15, 2019, 12:50 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I want both me and my neighbors to be safe. Let's get this done.

Name not shown

Quiet Zone Assessment Survey

March 15, 2019, 4:51 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

We have many more important things to spend money on. What a waste! I don't mind train noise.

Name not shown

inside ward 5 March 15, 2019, 6:36 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

This is silly.

Name not shown

inside ward 5 March 15, 2019, 6:54 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There are much better ways to spend our limited tax dollars.

Philip Meyers

inside ward 2 March 15, 2019, 7:57 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

No response

Name not shown

inside ward 4 March 15, 2019, 9:25 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Kyle Lady

inside ward 2 March 15, 2019, 9:45 AM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Name not shown

inside ward 2 March 15, 2019, 10:16 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Brian Schwab

inside ward 5 March 15, 2019, 10:32 AM

Quiet Zone Assessment Survey

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 15, 2019, 10:34 AM

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

If this were being discussed for any other reason than just to mollify the folks who brought property next to rail lines they knew were there and are now unhappy with their choice, I would be for improving safety. I'm a little disappointed that we would be proposing spending significant general tax payer money to address the self-identified inconvenience of folks who should have known better, when there are other far more pressing infrastructure needs around the city like basic drive-able roads.

Name not shown

inside ward 1 March 15, 2019, 10:37 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

I am still divided on this issue- in general I don't have a problem with the train noise, but it seems to have gotten significantly louder in the past year or two. I have lived near the tracks for several years and the sounds never bothered me much until last summer (2018), when suddenly it seemed the horns were much louder than before and went on and on for several minutes at a time, multiple times per night. My husband and I suffered many sleepless nights that we never experienced in the past, and now that we are starting a family we are worried about the noise affecting our child's sleep as well. If the results of the survey are largely in favor of not investing in safety upgrades, I hope we can negotiate to reduce the volume and frequency of the train horns. Thank you!

Name not shown

inside ward 5 March 15, 2019, 10:43 AM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

I'm confused by the options offered above: I thought that Scenario 2 and Scenario 3 had closures.

I am surprised that the "Highest Safety" option doesn't include closures. A closure would reduce accidents at the closed crossing, right? Is the formula: a closure would push traffic to higher-risk crossings?

Virginia Simon

inside ward 5 March 15, 2019, 10:48 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 March 15, 2019, 10:58 AM

Question 1

 Scenario 1:Gates and Signals upgrade only, no closures. Estimated Cost - \$6.69 million

Question 2

It would be great if the train horn decibel was lowered and not repeatedly blasted for long periods of time in the night. Some nights are shorter and quieter, some nights are long, loud and drawn out. Consistency with a lower decibel would be great.

Peggy Russo

Quiet Zone Assessment Survey

March 15, 2019, 11:00 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 1 March 15, 2019, 11:02 AM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

No response

Leslie Sobel

inside ward 1 March 15, 2019, 11:09 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live fairly near the RR and don't find the noise problematic. The safety risk of no horns is not worth the quiet to me.

Name not shown

inside ward 1 March 15, 2019, 11:16 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

inside ward 5 March 15, 2019, 11:17 AM

Question 1

Scenario 2, 3, or 4:Cost Effective and Safer, no closures. Estimated
 Cost - \$7.15 million (cost estimates will vary based upon crossings).

Question 2

Thank you for investigating this issue. The public health impact of the train horn/train cannot be underestimated. In addition to the physical safety of those crossing the train tracks, the high decibel horn causes reduced sleep quality, increased fatigue, depressed mood or well-being, and decreased performance. Other effects of noise during sleep include increased blood pressure, increased heart rate, increased finger pulse amplitude, vasoconstriction, changes in respiration, cardiac arrhythmias, and increased body movement. Particularly sensitive groups include the elderly, shift workers, persons vulnerable to physical or mental disorders, and those with sleeping disorders. Here is one study (out of many) that describes these effects:

https://bmjopen.bmj.com/content/3/5/e002655.full

Name not shown

inside ward 5 March 15, 2019, 11:18 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

The tracks have been there for years. Suddenly it's an issue? I think this is a crazy waste of money. I lived across from tracks that ran from 12 to 20 trains a day. There was a crossing a couple hundred yards from my house and another about 4 blocks down. For a few nights in spring when I first opened windows I noticed the trains. I soon slept through them.

Name not shown

inside ward 4 March 15, 2019, 11:40 AM

Quiet Zone Assessment Survey

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

Trains make noise. The train tracks have been there longer than the residents. Don't live next to train tracks if you are bothered by the noise.

Name not shown

inside ward 5 March 15, 2019, 11:56 AM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I hear the noise in the wee hours occasionally and am comforted by it

Name not shown

inside ward 4 March 15, 2019, 12:18 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I enjoy the sound of train horns, and would be disappointed if we were to allocate millions of dollars to quieting the trains. If people don't like the train noise, they shouldn't buy or rent near the train tracks. Spending millions to satisfy those who can move elsewhere when there are so many much more compelling needs in our city budget would be a travesty.

Name not shown

inside ward 5 March 15, 2019, 12:26 PM

Question 1

Scenario 6 and 7:Phased Implementation, no closures. Estimated Cost
 \$ 2.5 M plus \$4.6 M borne over the period of implementation

Question 2

The train horn noises don't bother me, but they bother a lot of people. How about this gets put on the ballot for an actual vote of the entire voting public?

Name not shown

inside ward 4 March 15, 2019, 12:43 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I feel sorry for people who are struggling with sleeping through the train noise. I just bought a house here and I specifically stayed away from train tracks for this reason. I couldn't escape the highway noise, however, even though I really tried. Depending on the weather, the highway keeps me awake too, unless I play some sort of white noise generator or a fan. So, 2 things -- one, I do not support doing anything about train noise with city tax funds unless highway noise is also addressed and two, I am vehemently opposed to any increase in property tax - the current rate nearly priced me out of this city as it is. Now, if the people affected by the train noise want to contribute voluntarily to the cost of these improvements, that's fine. But we should not all pay for it.

Name not shown

inside ward 1 March 15, 2019, 1:44 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I live on the hillside directly across from the railroad tracks. The horn is not the only sound involved with this. I've always accepted the train horn signal but, even if I didn't, it would not justify the extreme expense of the alternatives

Alison Bank

inside ward 1 March 15, 2019, 2:02 PM

Quiet Zone Assessment Survey

Question 1

I accept the impact of train horn noise and recommend no further investment

Question 2

I live very close to a train so I understand the impact it has, but I think making Ann Arbor more affordable and creating affordable housing is of much more importance than quiet trains.

Name not shown

inside ward 2 March 15, 2019, 2:07 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I cannot believe that I am just hearing about these proposed solutions to this ongoing issue--it is just a few hours short of this survey going offline. With that said, I do not have time to adequately study the proposed solutions, although I feel pretty strongly about wanting to give input! A question: Has this been reported in the local paper and I've just missed it? Probably not, as so much that is happening in AA doesn't make it to print nowadays...thanks, I guess, for attempting to gather public input in this way...Where would I have heard of this sooner? (I've already signed up for updates via email from the city and got no notice from that source...FYI, I DID get notice of this through my neighbors on Nextdoor.)

Name not shown

inside ward 5 March 15, 2019, 2:08 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

There are literally thousands of ways to better spend this public money. I don't think that the city should have the respond with this much funding, to a problem that only impacts a few people.

Name not shown

inside ward 1 March 15, 2019, 2:33 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I have lived in my house for over 20 years. I knew when I purchased my house that there were at grade crossings near my home. (Six crossing to be exact, based on the map in the report.) Your report did not mention any accident history. So, is there really a safety problem? We do not find that the sounding of the train horn to be a nuisance. (In fact, I like it and find it to be comforting.)

Name not shown

inside ward 1 March 15, 2019, 2:37 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I have lived close to the train tracks for 20 years (first on Chapin Street and now by the Huron River in River Ridge). The noise is minimal and adds to the charm of Ann Arbor. The money could be better spent elsewhere. Fix the roads.

Name not shown

inside ward 4 March 15, 2019, 2:44 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response

Name not shown

Quiet Zone Assessment Survey

March 15, 2019, 2:56 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

I am adamantly against any of these "investments.".Train sounds are part of living in an urban environment. For several years I've lived only a few blocks away from the W. Liberty Street crossing, before buying my house I lived on 2nd street only 2 blocks from that same crossing, and I'm fine with it as is. I lived about 30 feet from a fire station in the Foggy Bottom section of Washington, DC where fire trucks sounded their sirens upon leaving the station several times a week between midnight and 7am. Our house was less than 10 feet from the roadside sidewalk and my bedroom was in the front main floor of the house. I'm not a heavy sleeper and by the 3rd overnight siren I was sleeping through the "noise." Bodies are quite adaptable.

Perry Myers

inside ward 5 March 15, 2019, 3:34 PM

Question 1

• Scenario 5:Highest Safety, no closures. Estimated Cost \$7.91 million

Question 2

No response

Name not shown

inside ward 1 March 15, 2019, 4:29 PM

Question 1

 I accept the impact of train horn noise and recommend no further investment.

Question 2

No response