

**AN EVALUATION OF PASSENGER VALUES & COMPARISON OF THE
MAX VERSUS OTHER REGULAR BUSES**

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TABLE OF CONTENTS

1. INTRODUCTION..... 1

2. METHODOLOGY 3

3. FINDINGS 5

4. SUMMARY 9

REFERENCES 11

ANNEX A. MAX Images 13

ANNEX B. Survey Templates 19

ANNEX C. An Explanation of Box Plots..... 23

ANNEX D. Ridership 25

ANNEX E. Passenger Comments from the MAX Values Comparison & Surveys 27

ANNEX F. Passenger Comments as Reported by Operators & Operator Comments..... 39

LIST OF FIGURES

Figure 3.1 Passenger Value Ratings 6
Figure 3.2 MAX vs Other Buses: Passenger Evaluation 7
Figure 3.3 Operator Evaluation..... 8

LIST OF TABLES

Table E1: Passenger Comments as Complaints from the Values Survey 28
Table E2: Passenger Comments as Compliments from the Values Survey 28
Table E3: Passenger Requests/Suggestions/Proposals from the Values Survey..... 28
Table E4: Passenger Comments as Complaints from the Comparison Survey..... 34
Table E5: Passenger Comments as Compliments from the Comparison Survey 34
Table E6: Passenger Requests/Suggestions/Proposals from the Comparison Survey 34

1. INTRODUCTION

The Utah Transit Authority (UTA) started a project called “MAX”, which refers to seven planned BRT implementations (1), according to the 2030 Regional Transportation Plan (RTP) (2). The 3500 South Street corridor has been chosen as the first of the seven BRT lines to be implemented to help alleviate congestion and reduce passenger loads on RT 35, a regular bus line which operates along this corridor. The 3500 South BRT line will run from Magna to the 3300 South TRAX stations, providing fast and reliable connection for commuters from Magna and West Valley to the LRT Sandy line. It covers 10.1 miles (without the Magna loop), covers 23 bus stops (in both directions), and links riders to light rail (1). The 3500 South BRT line was launched on July 14, 2008.

UTA has purchased 10 MAX buses from Belgian manufacturer, Van Hool, and they are assigned to the 3500 South BRT line. The buses are equipped with full stainless steel frames and body panels, top mounted cooling systems, 330 horsepower Cummins ISL motors, object detection systems, and full low-floor boarding capabilities. Wider aisles, center ADA boarding, more windows, unique European styling, and improved ride quality will further enhance the riding experience for passengers. In addition to providing an improved riding experience, these key components will reduce vehicle maintenance and extend vehicle life. BRT buses will also have a new and unique paint scheme, which will give identity to the new “MAX” system (1). Images of the MAX bus and some of its features can be found in Annex A.

UTA wants to assess the consequence of the decision and directed that a survey be conducted to find out if and to what extent the MAX meets customers’ preferences.

2. METHODOLOGY

The survey was conducted in three segments:

- (1) A survey of passenger values related to vehicle attributes,
- (2) A comparative survey between the MAX and other buses,
- (3) An operator survey.

Copies of these surveys can be found in Annex B. The values and comparative surveys are very similar in content and design. The objective of the values survey was to measure how important various design and performance features were to passengers using a scale from 0 - 10. The comparative survey rephrased the value questions and posed them to a second set of passengers in which they were asked to compare the MAX against other buses. The same scale of 0-10 was used for the comparative survey (3).

The research was organized in such a way to ensure that the same number of surveys was issued to the same audience at the same time — equal in every aspect.

A few of both types of survey forms are prepared in Spanish, keeping in mind that there are many people riding in this route who speak only Spanish and could not understand English.

In addition to the scalar questions, respondents were asked how long they have affiliated with UTA and how often they ride. They were also allowed to make any unspecified comments or suggestions they wished to offer in the space provided on the survey forms.

3. FINDINGS

The passenger surveys had responses from 426 passengers. The surveyed passengers consisted mainly of regular transit users. Among respondents, 78% ride more than once per week, 63% have ridden with UTA for more than one year, and more than 73% have ridden UTA buses for at least six months (for more details on ridership please refer to Annex D).

The first group of passengers evaluated how important they found selected bus characteristics to be on a scale of 0 to 10, with “0” being of no importance and “10” being of the highest importance. The results are found in Figure 3.1. (For more information about box plots see please Annex C. Note that the box plot at Annex C is displayed horizontally but is otherwise not different from those shown in this report.) Nothing as a whole was unimportant, therefore, one must look at relative scores to determine where management should begin to focus on customer satisfaction.

The survey on vehicle attributes had 212 respondents. The results from this survey show that climate control is considered the most important factor to the surveyed passengers, with a median score of “10,” which is why the median line cannot be found in the box plot. The spread (red box) is also very tight, meaning that a greater number of people were closer in agreement to the average. High outside temperatures in mid-July seem to have biased some respondents when grading importance of the various bus features. Next in importance is a bus that is fast (accelerates quickly), a smooth ride (not jerky), and has three-door configuration. A comfortable seat, seats easier to get in and out, a bus that looks nice, lots of leg room, and a quiet ride (no loud engine noise) also scored relatively high, although the spreads are increased. Windows with nicer views to the outside was of the least importance to passengers. Respondents also made unsolicited proposals for additional bike racks for buses in this route.

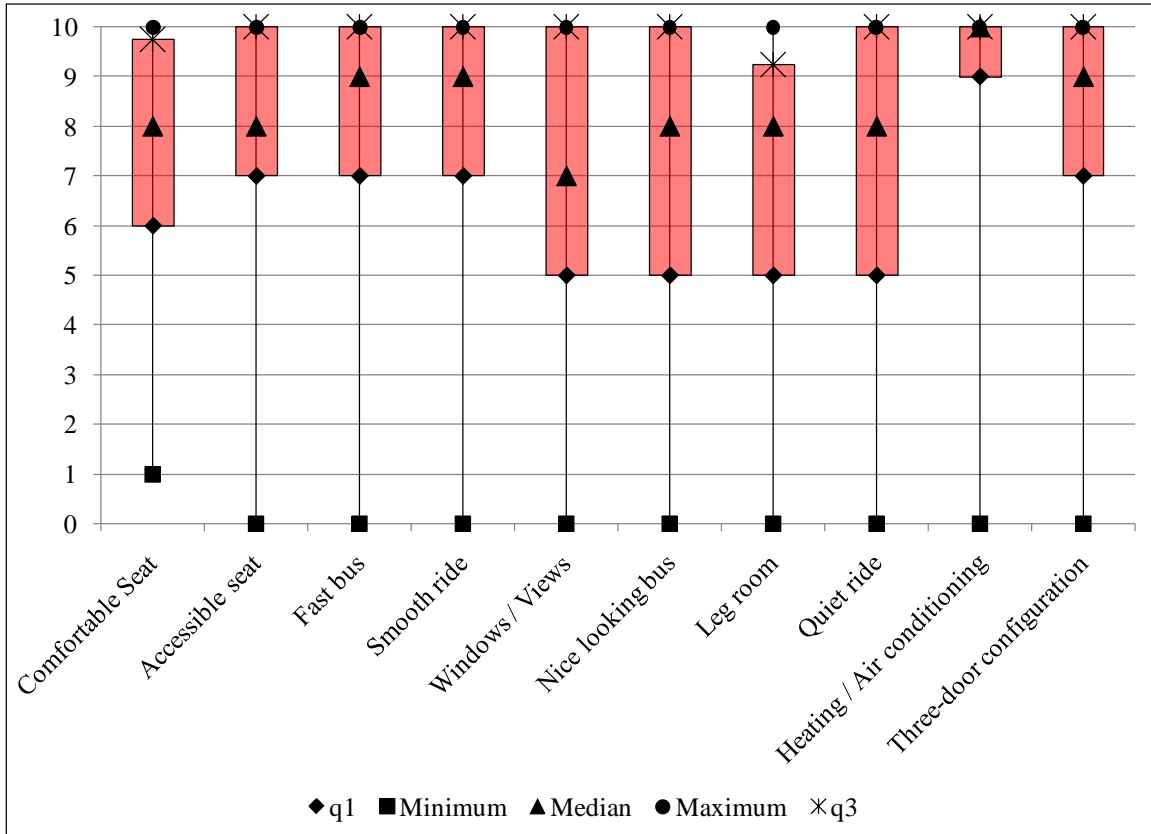


Figure 3.1 Passenger Value Ratings

A second group of passengers used the same values to compare the MAX with other buses. This was done by using scalars of 0 - 10, but in this instance the values had different meaning. Each question was an affirmative statement about the superiority of the MAX compared to other buses in the fleet. Passengers then scored each statement according to the level they agreed or disagreed: a value of “0” meaning total disagreement; a value of “5” meaning no difference, indifference, or inability to distinguish; and a value of “10” meaning total agreement. Pictures of thumb up/down were used for a better understanding of the answer types. The comparative survey included 214 respondents, and the results are presented in Figure 3.2.

Overall, the MAX scored superior (a median score of “10”) against other buses. It scored the highest against other buses with respect to appearance, and three-door configuration. The median score for these two was “10”. Push buttons also received the same score with a little larger spread. Appearance and three-door configuration scored highest in the mean and had the narrowest spread (standard deviation). The next features that the passengers liked most were windows with nicer views, a lot of standing room, reduced noise level, and better air-conditioning, although the spread is relatively high. The median score for all three was “9.” Seating options (comfort level/face-to-face configuration) and smooth riding have the lowest median scores, “8.” The lowest median and widest spread for the seating options show that many people do not think that the seats in the MAX are better, with regard to both comfort level and face-to-face configuration. Face-to-face seats, with insufficient leg room could be one of the probable reasons.

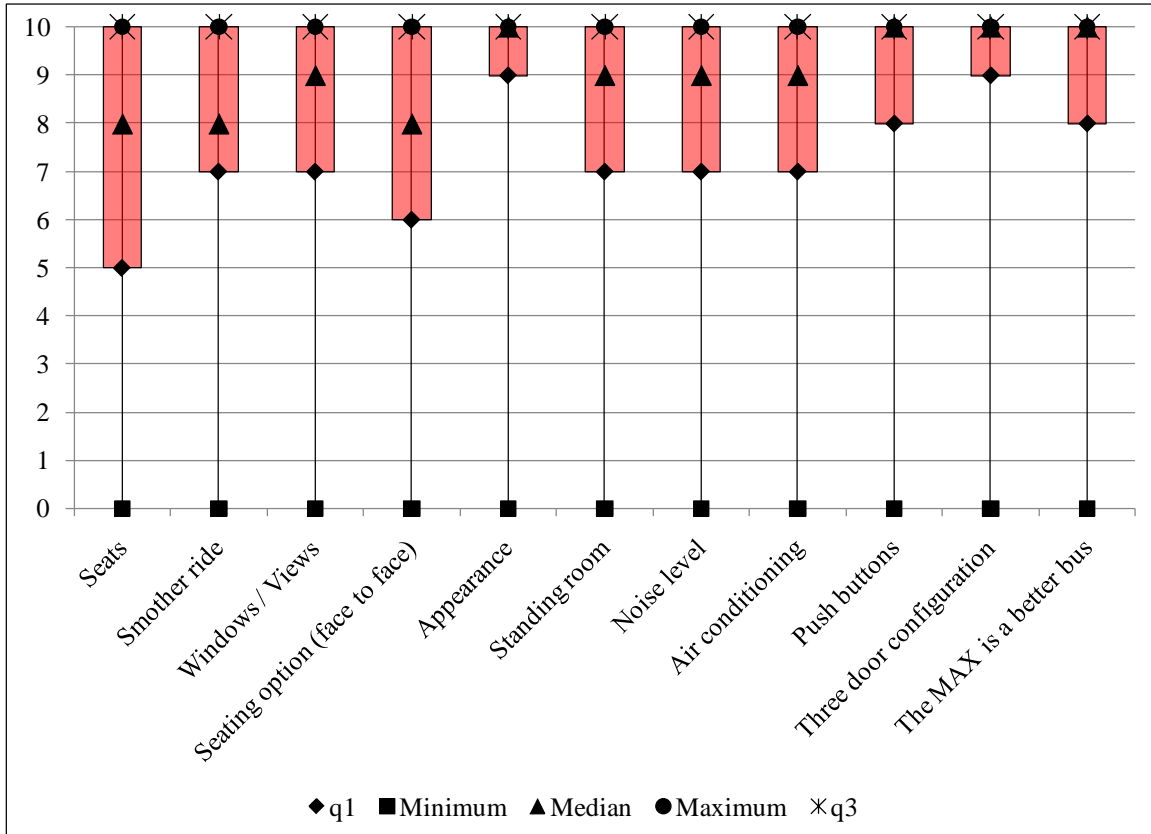


Figure 3.2 MAX vs. Other Buses: Passenger Evaluation

The operator survey questioned 20 UTA bus operators who had an opportunity to drive the new buses for at least a week. This particular survey was conducted by UTA itself, while the operators start/change their shifts. As a group, they expressed a high opinion of the MAX, giving it a median score of “9” (Figure 3.3). Although most areas scored higher than “7,” acceleration received a median score of “5.5,” while the TSP feature received a median score of “6,” with a relatively wide range in answers. Reasons for low scores for TSP implementation seem to be twofold. First, most of the drivers are still not familiar with the implementation of TSP, which is currently active at only six intersections along the route. It is possible that they do not notice TSP benefits at the operating intersections while they notice delays at the intersections with no TSP functionality. Second, it is possible that TSP parameters are still not sufficiently fine-tuned so as to support specific requirements at each TSP-operating intersection.

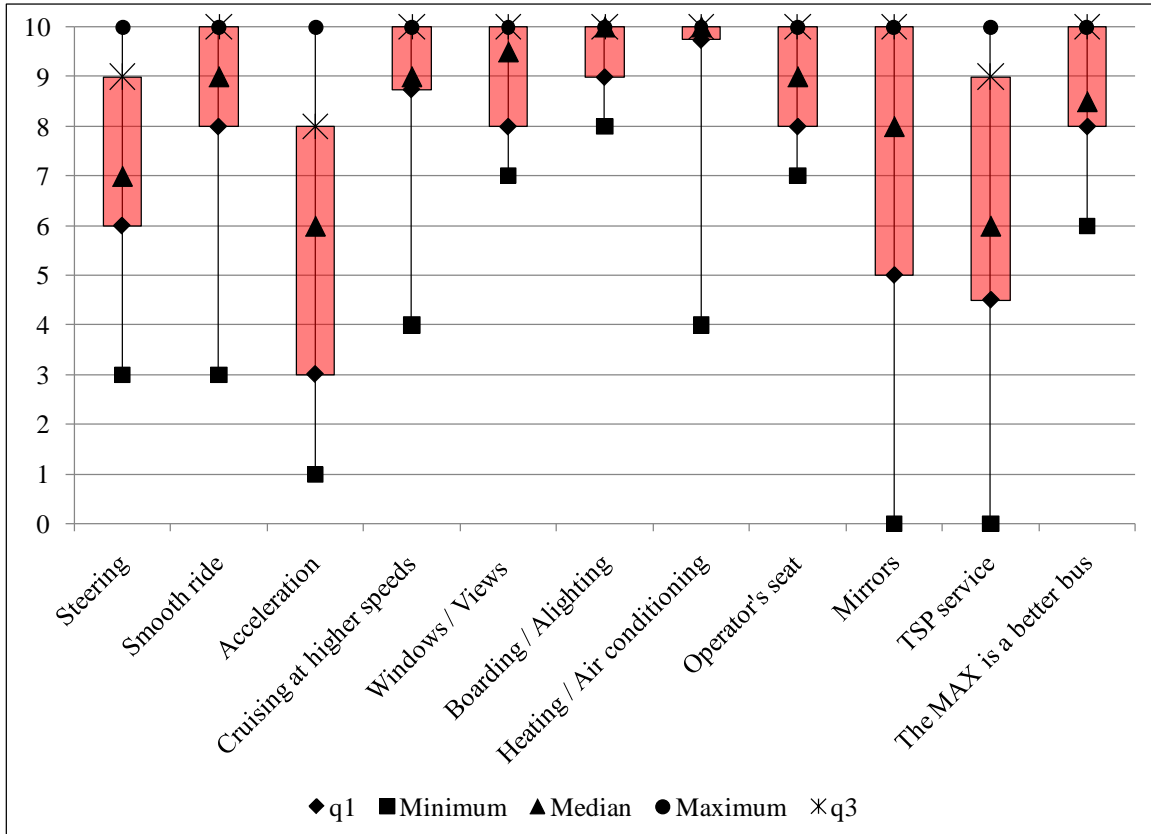


Figure 3.3 Operator Evaluation

The passenger comments received by the operators indicate that most of them like the MAX bus. While the operators received different feedback from the passengers, most passengers liked the fact that the MAX is faster, although some people did not like the limited stops. People also appreciated the facilities, like the three-door configuration and ticket vending machines at bus stops, which reduce bus dwell times, instead of purchasing tickets from the driver. Overall, the operators received many more compliments than complaints.

Operators also had the opportunity to reveal their own opinion about the new MAX bus. While a majority of them complained about the functioning of TSP, few operators complained about acceleration.

4. SUMMARY

The main purpose of this project was to evaluate overall bus features which are important to the passengers, as well as to assess the passenger response on the new MAX bus. The results of the value survey show that climate control is the most important factor for passengers. Fast, smooth rides are the subsequent features they always want to have. They believe that three-door configuration would make it easier to access and exit the bus and vending machines at bus-stops would reduce the waiting time in the bus. The comparison survey shows that passengers are delighted with the appearance, three-door configuration, and push buttons in the MAX bus. Windows, standing room, low noise level, and air-conditioning are the next features they are happy about, even though the range of responses varies more. The comfort and configuration of the seats have the greatest variation of responses, yet with a relatively high median score. From Figure 3.1 (Passenger Value Ratings) it can be seen that the response for “Comfortable seat” and “Accessible seat” both had a median score of 8. This relatively high median score shows that comfort and accessible seats are of high importance for passengers. Similarly, Figure 3.2 (MAX vs. Other Buses: Passenger Evaluation) shows that the seating options (comfort level/face-to-face configuration) have the median scores of “8.” Comparatively, the median customer response in Figure 3.2, concerning seating, meets the median importance rating of seating as displayed in Figure 3.1 (both scored “8”). The responses concerning seating options could be subjected to passengers’ experience while riding other UTA buses. The other buses have different types of seats with higher and with thicker cushions and face-to-back seating options. However, the practice shows that seats of this type are harder to maintain. Use of these seats can also limit arrangement of seating options on the bus. The new seats, introduced on the MAX line, have different design. They are lower, with thinner cushions, easier to maintain (clean and repair), and they can be arranged in such a way to maximize passengers’ flow and comfort on the bus. MAX seating options combine both face-to-back and face-to-face options (see images in Annex A).

The comments in the comparison survey revealed that, although there are few people who want MAX to have additional bus stops, a large number of passengers understand and liked the fact that having fewer bus stops is one of the key factors for the MAX to be quicker and to have less travel time. Both surveys have some passengers, who requested more bike racks in the MAX, as most of the buses arrive with filled in bike racks and they have to wait for so long until they find one of the next buses with bike racks empty. They think that an additional bike rack facility would be very helpful. Operators received compliments from the majority of passengers whereas, few passengers had both compliments and complaints.

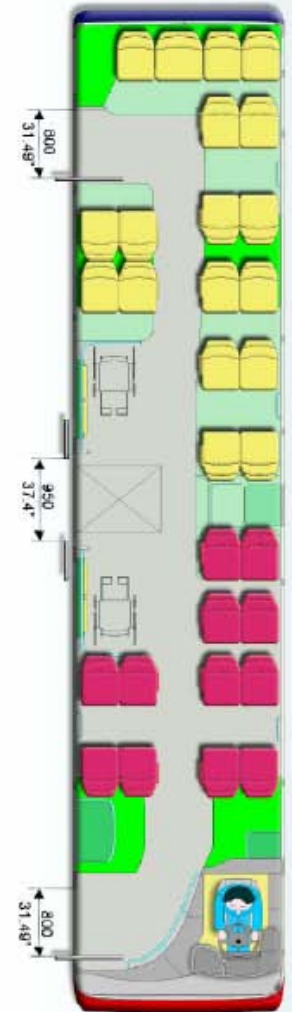
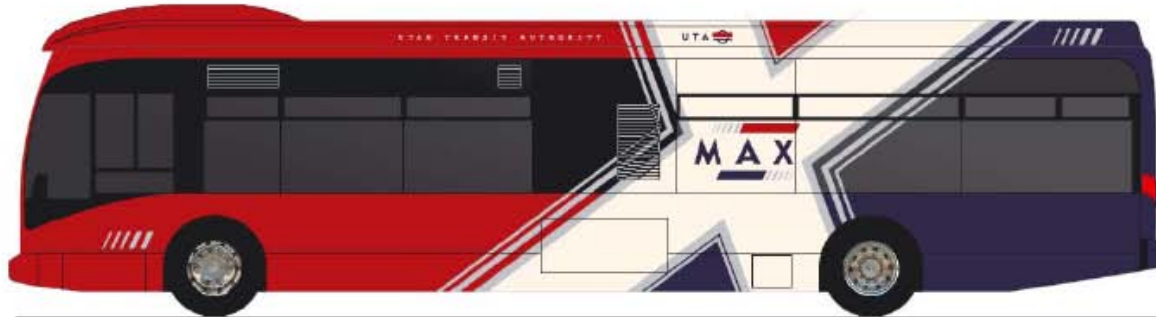
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October 2007.
http://wfrc.org/cms/index.php?option=com_content&task=view&id=92&Itemid=38.
3. B. Dean., G. Pachucki., J. Yip. *An Evaluation of Customer Values and a Comparison of the OPTIMA versus Other Local Buses*. Utah Transit Authority, Salt Lake City, Utah. 2005.

ANNEX A. MAX Images

Van Hool Bus Specifications

VANHOOL A300L		FINISH	REMARKS
<small>THIS DRAWING MAY NOT BE REPRODUCED OR PASSED ON IN ANY FORM, BY COPY, FILM OR OTHERWISE MEANS, WITHOUT PERMISSION IN WRITING FROM THE PUBLISHER.</small>			
1	NVR Red FLNA 30846/ Dupont 777406 (as sample)	X	
2	NVR Blue FLNA 5769/ Dupont 777407 (as sample)	X	
3	White FLNA 40573/ Dupont 735085 (as sample)	X	
4	White reflective 3M 580-10		X
5	Black reflective 3M 580-85		X
6	WINDOWS (natter)		X
7	3M Scotchcal B173 Perforated Window Marking Film		X
8	MAX UTA		X
9	Red Avery 950 + Blue Avery 979		X
10	STAR TRANSIT SUBSIDARY		X
11	White Avery 900		X
WHEELS/BUSHERS	Alcoa		
REAR VIEW MIRRORS	Black		



Seat Layout

- Seats without raised platform
- Seats with raised platform



Exterior of the MAX Bus



Central ADA Boarding



MAX Seating Options and Windows



Rear Door Open Button and Location of Push Buttons



Gillig Bus

MAX Bus

Window Tinting on the MAX Compared to Other UTA Buses

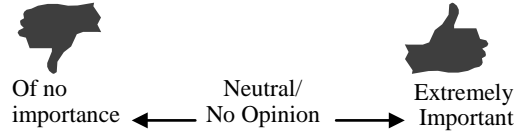
ANNEX B. Survey Templates



PASSENGER SURVEY

1

UTA is beginning to introduce new buses into service. We want our buses to meet our customers' needs. Please let us know what is IMPORTANT to you when riding a bus by answering the questions below. CIRCLE YOUR RESPONSES.



- 1. A comfortable seat.
2. Seats easier to get in and out.
3. A bus that is fast (accelerates quickly).
4. A smooth ride (not jerky).
5. Windows with nice views to the outside.
6. A bus that looks nice.
7. Lots of standing room.
8. A quiet ride (no loud engine noise).
9. Good heating and air conditioning system.
10. Three-door configuration to offer better accessibility.

(Please check the appropriate box)

How long have you ridden UTA buses? Less than 6 months, 6 Months- 1 Year, Longer than 1 year

How often do you ride? This is my first time, Less than 1 time per month, Between 1 time per week and 1 time per month, More than 1 time per week

If you would like to make any other comments, please do so below or on the reverse side. THANK YOU.

Four horizontal lines for comments.

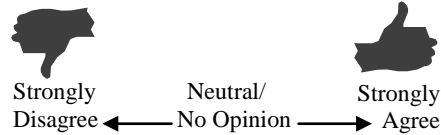
For Office Use Only
Block _____ Route _____ I O E W Trip Start Time _____ F M



PASSENGER SURVEY

2

You are riding a new bus in UTA service called the MAX. We would like to know what you think about this new bus. Please share your opinions with us by showing the level to which you agree or disagree with each statement below. CIRCLE YOUR RESPONSES.



- 1. Seats on the MAX are more comfortable. 0 1 2 3 4 5 6 7 8 9 10
- 2. The MAX offers a smoother ride (it's less jerky). 0 1 2 3 4 5 6 7 8 9 10
- 3. The MAX has windows with nicer views to the outside. 0 1 2 3 4 5 6 7 8 9 10
- 4. The MAX has better seating option (face to face). 0 1 2 3 4 5 6 7 8 9 10
- 5. The MAX looks nicer than other buses. 0 1 2 3 4 5 6 7 8 9 10
- 6. There is more standing room on the MAX bus. 0 1 2 3 4 5 6 7 8 9 10
- 7. The MAX is more quiet than other local buses. 0 1 2 3 4 5 6 7 8 9 10
- 8. The MAX has better air conditioning. 0 1 2 3 4 5 6 7 8 9 10
- 9. Push button in the MAX is an improvement over a pull cord. 0 1 2 3 4 5 6 7 8 9 10
- 10. Three doors make easier to get into and off from the MAX bus. 0 1 2 3 4 5 6 7 8 9 10
- 11. Overall, the MAX is better than other UTA buses. 0 1 2 3 4 5 6 7 8 9 10

(Please check the appropriate box)

How long have you ridden UTA buses?

Less than 6 months

6 Months- 1 Year

Longer than 1 year

How often do you ride?

This is my first time

Less than 1 time per month

Between 1 time per week and 1 time per month

More than 1 time per week

If you would like to make any other comments, please do so below or on the reverse side. THANK YOU.

For Office Use Only			
Block _____	Route _____	I O E W	Trip Start Time _____ F M

UTA OPERATOR SURVEY

You are driving a new bus in UTA service called the **MAX**. We would like to know what you think about this new bus. Please share your opinions with us by indicating the degree to which you agree or disagree with each statement below. **CIRCLE YOUR RESPONSES.**



Strongly Disagree ← Neutral/ No Opinion → Strongly Agree

- | | |
|--|------------------------|
| 1. The MAX is easier to steer than other local buses. | 0 1 2 3 4 5 6 7 8 9 10 |
| 2. The MAX operates more smoothly (less jerky). | 0 1 2 3 4 5 6 7 8 9 10 |
| 3. The MAX accelerates faster than other local buses. | 0 1 2 3 4 5 6 7 8 9 10 |
| 4. The MAX cruises more smoothly at higher speeds. | 0 1 2 3 4 5 6 7 8 9 10 |
| 5. Windows on the MAX offer better views for riders. | 0 1 2 3 4 5 6 7 8 9 10 |
| 6. The MAX enables easier boarding and alighting. | 0 1 2 3 4 5 6 7 8 9 10 |
| 7. The MAX has better heating and air conditioning. | 0 1 2 3 4 5 6 7 8 9 10 |
| 8. The operator's seat is more comfortable on the MAX. | 0 1 2 3 4 5 6 7 8 9 10 |
| 9. The MAX has better mirrors. | 0 1 2 3 4 5 6 7 8 9 10 |
| 10. TSP service for MAX is an advantage. | 0 1 2 3 4 5 6 7 8 9 10 |
| 11. Overall, the MAX is better than other local buses. | 0 1 2 3 4 5 6 7 8 9 10 |

(Please check the appropriate box)

12. Are your customers offering more complaints, more compliments or the same of each?

More Complaints	→	<input type="checkbox"/>
More Compliments	→	<input type="checkbox"/>
The Same for Each	→	<input type="checkbox"/>

13. What are they saying? (Continue on reverse side if you need more space)

14. If you have any specific comments, please share them below. THANK YOU

For Office Use Only

Block _____	Route _____ I O E W	Trip Start Time _____	F M
-------------	---------------------	-----------------------	-----

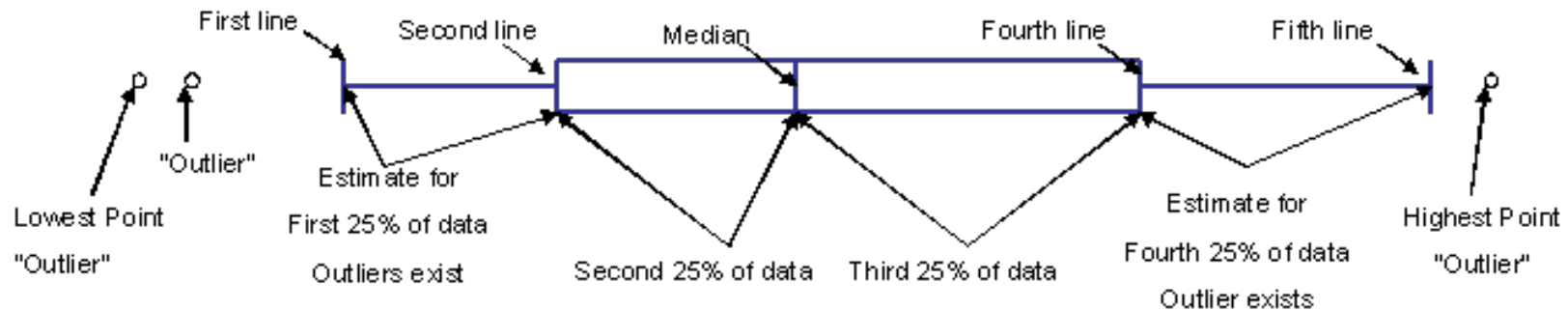
ANNEX C. An Explanation of Box Plots

Understanding Box Plots

- Data has two important features, center & spread
- A Box Plot is a simple tool for analysis
- A Box Plot's center is identified by
 - Median – 50% of the data are above and 50% of the data are below the median.
- A Box Plot's spread is measured by length
- A Box Plot puts data into four buckets
 - First 25% of data
 - Second 25% of data
 - Third 25% of data
 - Fourth 25% of data

Each vertical line in a box plot identifies or estimates important divisions. The third vertical line from the left is the median with 50% of the data on each side of the line. The second (fourth) vertical line from the left is the lower (upper) boundary of the box and it splits the lower (upper) 50% into two equal pieces (25% each). The first (last) vertical line at the left estimates where the end of the data should be under normal conditions and any point beyond is called an outlier. Outliers are so far from most of the data that they are considered to be part of a different population.

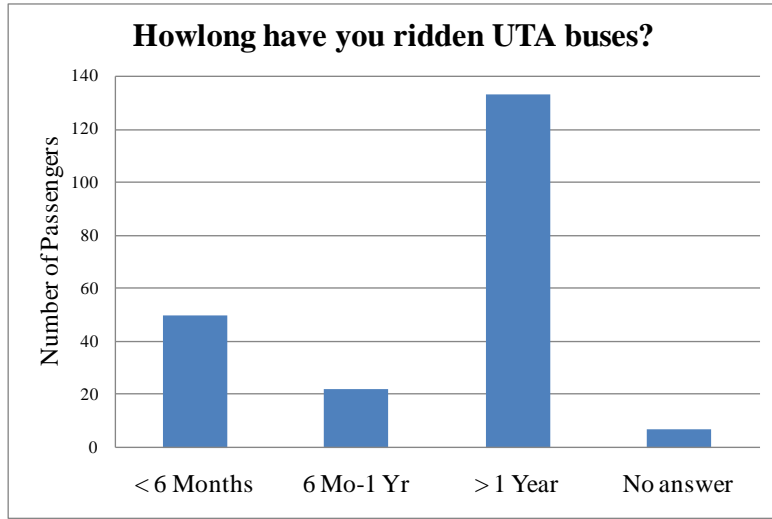
Spread should be visualized by the length of the four parts defined by the five vertical lines, include outliers in the length if they exist on either end. In the example below, the spread of the first 25% data length is longer than the spread of the second 25% data length. Six visual comparisons can be made one length relative to another and these comparisons provide information.



Source: Utah Transit Authority, *OPTIMA Bus Survey*

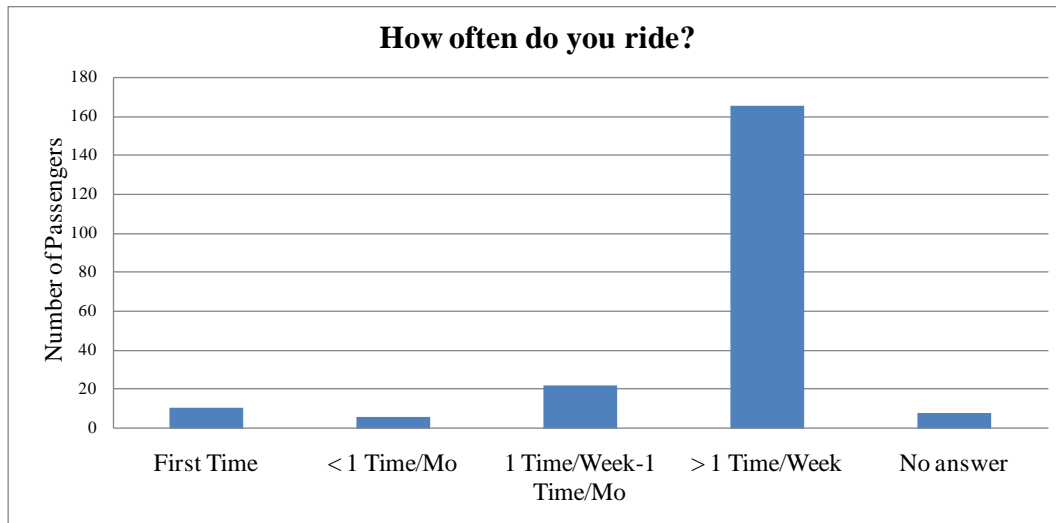
ANNEX D. Ridership

Question #1: How long have you ridden UTA buses?



	< 6 Months	6 Mo-1 Yr	> 1 Year	No answer	Total
How long have you ridden UTA buses?	24%	10%	63%	3%	100%

Question #2: How often do you ride?



	First Time	< 1 Time/Mo	1 Time/Week-1 Time/Mo	> 1 Time/Week	No answer	Total
How often do you ride?	5%	3%	10%	78%	4%	100%

**ANNEX E. Passenger Comments from the MAX Values Comparison
& Surveys**

PASSENGER COMMENTS FROM THE VALUES SURVEY SHEETS

Summary: The two survey types were administered to 425 passengers of which 211 were asked to reveal what attributes they valued most in a bus by indicating their level of agreement with several value statements on a scale from 0 to 10. In accordance with established practice, respondents were offered an opportunity to make any unstructured comments. Passengers were allowed to make as many as they wished, of which 83 of 211 passengers provided comments which totals to 88, as some respondents offered more than one comment. Regardless of the source each distinct comment was counted and categorized.

The comments are grouped into three types, namely complaints, compliments and suggestions/requests/proposals. Several comments sounded more as suggestions than just complaints and compliments and most of the suggestions are found to be very personal. The following tables show the comments categorized according to the type.

Table E1 Passenger Comments as Complaints from the Values Survey

Description	Number
Schedule/On time	2
Drivers	2
Air-conditioning	1
Prices	1
No enough buses	1
No difference in service	1
Need more TSP	1
Complaints which are not clearly stated	1

Table E2 Passenger Comments as Compliments from the Values Survey

Description	Number
General/Unspecified statements of approval	23
Quick/Faster/Less stops	11
Nice drivers	2
Cheap ride	1
Seats	1
Bright lights	1

Table E3 Passenger Requests/Suggestions/Proposals from the Values Survey

Description	Number
General suggestions/Requests (mostly personal)	22
More bike racks	4
Buses on schedule	4
Lower prices	2
More faster	2

Bracketed insertions have been added to provide clarity where it was deemed necessary.

Log of Passenger Comments:

- Passenger 1: “More Sunday service [is needed]; some of us have to work.”
- Passenger 6: “35 and 35M both have their advantages. What I learned, you already know. What you are going to do and that’s what you are going to do.”
- Passenger 9: “Accessible”
- Passenger 10: “Put more MAX on every route in the valley.”
- Passenger 12: “This is my first time on this new system, but it seems that it’s going to be a success.”
- Passenger 16: “Love how quick the buses (MAX) get us back and forth from the TRAX to valley fair mall.”
- Passenger 17: “Service is great.”
- Passenger 18: “Get bathrooms at stops.”
- Passenger 23: “Good job.”
- Passenger 28: “Great MAX bus.”
- Passenger 29: “[I want] buses on time, not early and not late. 2. Have schedules printed - Bus 35 going to hourly with no notice wasn't too good.”
- Passenger 35: “I feel that the air conditioning could be better on all buses.”
- Passenger 36: “[Could not read].”
- Passenger 37: “Please deal with the scheduled time, a little better. Thanks. And no more mean drivers please. I suggest these buses should driven by lady drivers. Don't get mad, it's only a suggestion.”
- Passenger 38: “More bike racks in evening, when bus runs once an hour.”
- Passenger 49: “What is most important is being able to get where I’m going in on time. It takes me about 40 min to get from WVC to Downtown SLC by UTA, but only about 10 min by car. The system needs to be streamlined.”
- Passenger 53: “If there is a train @TRAX, the bus should wait for the people.”
- Passenger 55: “Let women and children sit before taking off.”
- Passenger 59: “It gets me where I need to go and is cheaper than driving every day. [MAX] is a very good idea. I like the MAX. It’s fast.”

- Passenger 62: “Friendly bus drivers, you can tell some don’t like their jobs, not everyone knows the bus rules. They should explain nicer. They should not work overtime, if it’s going to make them mean.”
- Passenger 63: “Straight connection on Redwood. No long waits @ SLCC. [I want] buses more often [in] #1.”
- Passenger 64: “Bring back a 7:00 a.m., #389.”
- Passenger 65: “Next time the price of gas goes up, lower your prices and advertise it. And get more people using buses and trains [TRAX].”
- Passenger 66: “I live in Daybreak. I wish there was service besides the quick one, going uptown. I would ride more often with more service in the South/West part of the Valley.”
- Passenger 67: “Need softer seats.”
- Passenger 69: “More seats better than standing room. Have drivers not take off until passengers are seated.”
- Passenger 70: “More reliability connecting with the 40th west bus.”
- Passenger 77: “I appreciate MAX.”
- Passenger 79: “A place for my bike is important.”
- Passenger 80: “Lower rates.”
- Passenger 81: “I really enjoy riding but the prices seem to be going high.”
- Passenger 82: “Thanks.”
- Passenger 84: “For years I have thought it would be great for buses to get an all day pass. Thank you.”
- Passenger 85: “I think that there should be more routes on upper east side.”
- Passenger 88: “Very good service! Thank you!”
- Passenger 89: “My comment would be that buses are faster but they should put local buses at least every half hour instead of an hour. I think it should be easier for people.”
- Passenger 93: “Please offer more bicycle carrying capacity on buses. I ride to work every day and do not want to be unable to catch the bus due to a full bike rack.”
- Passenger 94: “I like the express bus (MAX 35M) because it takes me faster to work than the normal 35.”
- Passenger 98: “I like the new MAX bus.”
- Passenger 102: “We need a MAX stop at 3200W and 3500. So please [make one].”

Passenger 103: "I like the bus running faster. And the time for transfer (2 hours) is a little time."

Passenger 104: "Frequency of buses is important. Direct route to TRAX is important. Reliability of time table is also important. Thanks."

Passenger 105: "To have buses on time."

Passenger 106: "Nice bus service."

Passenger 118: "More arrivals on time."

Passenger 120: "Not sure why MAX bus goes by Valley Fair Mall. [I] would prefer to bypass to save time."

Passenger 122: "Windows with nice view is not important, but I do like being able to see my bus stop ahead of time, so I don't surprise the bus driver."

Passenger 126: "Thank you for route 35M."

Passenger 130: "The MAX works great for me. I understand I may be a problem for the others who ride the 35 and want access to non-MAX stops but this does not apply to me. I ride from downtown to Magna & back 5 day/week."

Passenger 131: "I am glad to see UTA meeting longer distance travel needs more quickly, like MAX and Frontrunner."

Passenger 133: "I love the MAX bus. It has been great unlike the old buses."

Passenger 136: "The bus driver is very pleasant and courteous. Good looking bus."

Passenger 138: "Not enough buses."

Passenger 143: "I would catch the Magna 5:20 a.m. before and arrive at IMC hospital at 6:30 a.m. Now with MAX I catch the 5:17 a.m. in Magna and arrive at IMC hospital at 6:20 a.m. No difference, but less crowded in the AM and PM."

Passenger 144: "This bus is much faster."

Passenger 145: "This is a great idea."

Passenger 150: "I think it was a good idea to come out with the new bus."

Passenger 153: "I might have more options. [I am] 1st time rider. I think I need to ride it more. Overall I like it, and the idea that it is a straight route to TRAX, quickly is a great idea. That's why I am on it today."

Passenger 159: "Faster-better use of priority functions on Max. Better be on time."

Passenger 160: "They need to get more green light priority. The red lights are too lazy and it would make us happier to get home faster."

- Passenger 162: “I think you guys do a good job and I am glad you are putting in TRAX lines for West Valley, airport and others.”
- Passenger 164: “Longer lasting transfers.”
- Passenger 167: “Excellent bus system here in the Salt Lake Valley.”
- Passenger 170: “I like how they fast travel time from stop to stop.”
- Passenger 171: “Awesome seat on the wheels! And I like how we have something to do while riding (this) and especially the bright lights and the blue and red seat covers (totally awesome).”
- Passenger 172: “People need to ride buses because either they don’t have car nor have money to afford price of gas. So, it would be nice if buses can take people faster and closer to places they have to go.”
- Passenger 173: “I do like old yellow school bus style. No inside lights and a back window.”
- Passenger 174: “I enjoy MAX because I can accurately get to appointments & work on time by concession with TRAX. Thanks UTA.”
- Passenger 180: “This is first ride on the MAX. I’m excited to be able to get to TRAX faster.”
- “Passenger 182: “The 35 MAX is incredible! I normally take 236 to airport to take to take 550 home. But I’ve changed to this bus because of ride less stops, vanpool mates. [MAX is a] great bus. You utilize it well!”
- Passenger 183: “Updates on when the construction will be finished.”
- Passenger 186: “Buses need more room for bikes like 3 on the rack.”
- Passenger 187: “With 35 MAX, I plan to ride often.”
- Passenger 190: “I would like to have the MAX bus go down 3100S Magna. It’s so hard for me to walk to 27th. I have a bad back.”
- Passenger 191: “This bus is nice and fast. Get me to work in good time. Also get me home a lot faster. Margaret Malik.”
- Passenger 200: “I love the new 35M and all your drivers are friendly & courteous.”
- Passenger 201: “More efficient service on TRAX and other non-special service buses.”
- Passenger 204: “35M should have a stop on 35th & 9200W.”
- Passenger 205: “I love the new 35M. They get me to my destination quick & I love the fact that they run every 15[minutes].”
- Passenger 207: “Thanks to give a quality to the (Utahans) and I hope [you] keep doing more routes.”

Passenger 208: “Love the new MAX line. I’m sure it will only get faster. Thanks.”

Passenger 210: “I can’t believe so much money was spent on the MAX buses and there is no Wi-Fi on them. For 120K spent on the buses each an extra \$100 is nothing. There could also be earlier service in more remote locations, along with more frequent service.”

Passenger 211: “MAX works pretty well.”

PASSENGER COMMENTS FROM THE MAX COMPARISON SURVEY SHEETS:

Summary: Of the total number of 425 passengers 214 were asked to evaluate the MAX bus against other local buses by indicating their level of agreement with comparative statement on a scale from 0 to 10. As in value survey, passengers were allowed to make as many as they wish, of which 77 took the opportunity to make a total of 81, as some respondents offered more than one comment. Regardless of the source each distinct comment was counted and categorized.

Here also the comments are grouped into three types, namely complaints, compliments and suggestions/requests/proposals. All the comments are categorized and presented in the following tables.

Table E4 Passenger Comments as Complaints from the Comparison Survey

Description	Number
General/Individual	3
Seats (Not smooth/Not enough)	3
Engine noise	2
Air-conditioning	1
Bumpy	1
Tight leg room	1
Drivers	1
Price	1

Table E5 Passenger Comments as Compliments from the Comparison Survey

Description	Number
General/Unspecified statements of approval	27
Quicker/Faster/Less stops	9
Wheel chair accessibility/Space	3
Three-door configuration	2
Nice Drivers	1
Nice look	1

Table E6 Passenger Requests/Suggestions/Proposals from the Comparison Survey

Description	Number
General suggestions/Requests/Proposals (mostly personal)	10
More MAX stops/Specific MAX stops	6
More bike racks/Bikes inside the bus	3
Seats (More cushion/More leg room)	2
Bath rooms on bus	1
Buses on schedule	1
Sunday service	1
Lower price	1

Log of passenger comments on the comparison survey:

- Passenger 3: "I like [MAX]. MAX to TRAX has given me a better way to work using less gas."
- Passenger 7: "It's too hot in the bus, but it is more comfy. It's a great way for families to travel."
- Passenger 9: "This is our first time riding MAX. It was enjoyable-Thank you."
- Passenger 11: "I think it will be good if the bus driver can control eating and drinking in the bus."
- Passenger 19: "I love MAX."
- Passenger 22: "Bus routes need to be adjusted, so that transfers can be caught. I take 232 home and if I miss it then I have to wait an hour."
- Passenger 23: "More MAX stops on 3200W area would be a good idea."
- Passenger 24: "Thanks for the birthday bus! (My birthday is July 15th)."
- Passenger 25: "It's much faster, like that much better."
- Passenger 27: "Engine noise."
- Passenger 28: "Makes for a fast and comfortable ride."
- Passenger 31: "I am glad to know that UTA now recognizes that people on the west side need to get to work early in the city. With MAX, I can get to work on time rather than 1 hour early or 1/2 hour late."
- Passenger 33: "I love you guys."
- Passenger 35: "Bathrooms on the bus."
- Passenger 36: "I really like the ride from Magna to TRAX. Before I disliked it, too hot, too crowded, not enough leg room."
- Passenger 38: "The bus is smoother depending on which side you are on. If going westbound from TRAX it's too bumpy, therefore the seats are uncomfortable."
- Passenger 41: "I think MAX is a lot nicer to ride and a lot more efficient system."
- Passenger 59: "The buses like light rail need to be more accommodating to bicycles."
- Passenger 60: "It should stop at 3200W."
- Passenger 61: "Excellent and very convenient."
- Passenger 62: "I give thanks for good [service], and transporting people. I love this bus."
- Passenger 63: "Wheel chair accessibility is much improved. I also appreciate the quickness of MAX. I also appreciate having regular service for stops between the MAX stop services."

Passenger 70: "Leg room is a lot tighter."

Passenger 71: "Be on time and courteous."

Passenger 79: "Services with other buses are not hatching. I have to always wait for the next bus."

Passenger 80: "Love the idea of making SLC easier for commuters by expanding public transportation. Gas is expensive. Make for a cleaner city and less cars on the road."

Passenger 81: "The MAX should ride on Sundays."

Passenger 83: "I think MAX bus drivers need to lighten up. They supposed to provide "customer service" which entails having the appropriate attitude."

Passenger 85: "Do like the new MAX. It gets me to work faster."

Passenger 87: "Thank you for giving an all pay passes on a bus route. It's saving money. Instead of pay three fares, it's one."

Passenger 90: "The new MAX service is great. The wheelchair and handicap access is much better."

Passenger 91: "Keep up the good work. Thanks. Donny."

Passenger 92: "Good investment."

Passenger 99: "I think it's going to faster, when the construction work is going to be finish."

Passenger 103: "Wish the MAX went east from the TRAX."

Passenger 106: "MAX is nice."

Passenger 107: "Spanish [Unreadable]."

Passenger 108: "MAX stops at 3200W and 3500S, in both ways."

Passenger 109: "They need to have a couple more stops for this bus, before Valley Fair Mall."

Passenger 119: "I think MAX buses give a great improvement to transportation. I am sold 100% on the Max buses."

Passenger 127: "Have the regular UTA run more often than every 30 minutes."

Passenger 131: "MAX offers good service to those trying to get home from a long day."

Passenger 132: "I like MAX. Keep it going and make more."

Passenger 135: "The MAX bus is definitely a big improvement on the UTA system. You might want to do something like this with State St. The buses are way too packed."

Passenger 136: "Radio & TV outlets."

- Passenger 137: "I hope the buses will be on time, so I can get to work on time. Thanks."
- Passenger 144: "It would be nice to have more leg room on the face to face seats."
- Passenger 146: "They are great buses and easy to use."
- Passenger 147: "Really working well. You guys are doing an awesome job. Thanks."
- Passenger 148: "Need more MAX buses! And TVs like metro buses in California."
- Passenger 151: "I think the price change is outrageous but it may be due to the state and not UTA."
- Passenger 157: "Need more of them. Need music."
- Passenger 160: "Every MAX bus I have ridden in the past week has a noise coming from the engine that sounds like a tire rubbing. Is there a problem there? My only wish is that they would stop at the top of my street like regular 35. The regular 35 schedule is too long between pick-ups."
- Passenger 161: "Nice drivers. I pretty much like the new 35M buses except seats. They have no cushion at all. I liked the 3 door configuration especially. Overall, I believe 35M is an improvement."
- Passenger 166: "This is about 5 minutes faster than the regular route. It has made my TRAX connection every time, where the regular route only make the connection about 60% of the time."
- Passenger 167: "I love the MAX 35 bus, because it has 3 doors on the MAX. I ride it about ten times since July 14, 2008."
- Passenger 170: "More bike space, especially on TRAX. See Minneapolis light rail for an example (Hooks inside for bike)."
- Passenger 174: "It would be nice to have more accommodation for bicycles."
- Passenger 176: "Unreadable."
- Passenger 177: "It's an alright setup. [MAX] could be less wobbly/jerky."
- Passenger 178: "Thank you all so much for this new service. It is so much more convenient than standard buses."
- Passenger 179: "All in all it's a good ride. Lower the price rates. More cushion on the seats."
- Passenger 180: "I like the fact that the MAX buses have lesser stops."
- Passenger 183: "Not enough seats. [MAX] wasted too much space with backward seats."
- Passenger 184: "Bring it to Tooele."
- Passenger 189: "[Drivers] Talk more (clearly)."

- Passenger 191: “UTA should have more concern for the sake of public transportation, not the buses. Since the MAX system has been in place, it has been a hassle to get anywhere.”
- Passenger 192: “I don’t know if I like the fact that it only stops at certain stops. But I guess it cuts down on travel time.”
- Passenger 195: “The look of the bus is especially nicer and not having to show fare upon boarding makes for a much quicker transit time. This was a great idea.”
- Passenger 198: “The regular bus should run the same as before, you have to walk further. Also if you are at the bus, even if the bus is way early, they will pass you by (even if you are only 1/4th block away).”
- Passenger 200: “I like the no straps for W/C.”
- Passenger 202: “Poner paradero en la 32 west (To put whereabouts in the 32 west).”
- Passenger 203: “I love the convenience of the MAX. It works perfect for me.”
- Passenger 206: “Now that gas prices have been increased sharply, ridership is increased and the UTA strongly needs to increase bus services to the south end of the Valley. I personally want the old #17 or #43 on Redwood Rd back (1 bus) with Saturday and Sunday. Thank you.”
- Passenger 207: “The routes are really an improvement and help time wise.”
- Passenger 208: “Put a stop at the end of 35th south.”
- Passenger 214: “The seats are harder and seem narrower than the regular buses. The wheelchair space is nicely designed.”

ANNEX F. Passenger Comments as Reported by Operators & Operator Comments

FINDINGS OF THE MAX OPERATOR SURVEY FOR QUALITATIVE QUESTIONS

Summary: An operator survey asked 20 operators who have been driving the MAX bus for at least one week, to recount whether they had more complaints, more comments or about the same of both, from passengers on MAX buses. Operators were further asked to reveal the types of comments they received. The number of operators surveyed was very few, since only a limited number of the MAX buses were in operation, when the survey was conducted.

Operators were also asked to personally evaluate the MAX bus in nine categories. The results of the categorical evaluations are found in the main body of the report. They were further asked to provide comments about their experiences with the MAX. A log of both passenger comments received by operators and the operator comments follow.

Log of Passenger Comments as Reported by MAX Operators

- Operator 1: “They love the ride and the seats most like the 3 doors.”
- Operator 2: “Everyone that I talked to say that all love the new route.”
- Operator 4: “Enjoy the ride. [MAX is] faster and smoother.”
- Operator 5: “Like the speed of service. Like ticket machine being at stop. Like the new buses.”
- Operator 6: “Some like the quietness of the route while others don't like the limited stops.”
- Operator 7: “Faster to EOL. Very slow acceleration going uphill from stop.”
- Operator 9: “Wow! Nice bus. [MAX is a] great service and the best idea yet!”
- Operator 10: “Stops are too far apart. Why a stop at 3600W, instead of at 3200W. Why isn't there any closer to Millcreek TRAX, instead of 1200W. MAX often takes as long as Rt. 35 (over).”
- Operator 11: “The hour waiting for 35 in the middle of afternoon.”
- Operator 12: “They like the speed + bus.”
- Operator 13: “Awesome. Nice ride.”
- Operator 14: “They like the speed.”

Log of MAX Operator Comments

- Operator 1: “I love the bus. It’s very comfortable to drive.”
- Operator 2: “I don’t have any specific comment, only that I love this new piece of work.”
- Operator 4: “TSP has not worked for me at all and if it is working, I have not noticed.”
- Operator 7: “This coach is fabulous. Buy many more.”
- Operator 9: “#10 - signal priority doesn’t seem to work all the time.”
- Operator 10: “Too early to give qualified comment on the MAX. Would like [to have] another opportunity at later date. 2-4 weeks later. ”
- Operator 11: “It’s new and the (wrinkle) will get worked out with time.”
- Operator 13: “Acceleration feels much like an Artic [antic].”
- Operator 14: “Signal priority doesn’t help.”