NOTICE AND AGENDA OF PUBLIC MEETING

BUS SHELTER AND BENCH ADVISORY COMMITTEE

3:00 P.M. DECEMBER 20, 2018

RTC/RFCD ADMINISTRATION BUILDING
600 S. GRAND CENTRAL PARKWAY, ROOM 108
LAS VEGAS, NV 89106
(702) 676-1500

This agenda with full backup is available at the Regional Transportation Commission Administration Building, 600 S. Grand Central Parkway, Las Vegas, Nevada; the Regional Transportation Commission’s website, http://www.rtcnv.com; or by contacting Marin DuBois at (702) 676-1836.

THIS MEETING HAS BEEN PROPERLY NOTICED AND POSTED IN THE FOLLOWING LOCATIONS:

Clark County Government Center
500 S. Grand Central Pkwy.
Las Vegas, NV 89155

City of Henderson
Office of the City Clerk
240 Water Street
Henderson, NV 89015

CC Regional Justice Center
200 Lewis Ave.
Las Vegas, NV 89155

RTC
600 S. Grand Central Pkwy.
Las Vegas, NV 89106

RTC Website
www.rtcnv.com

Nevada Public Notice
https://notice.nv.gov

BY:

DocuSign Envelope ID: 79507CC6-09F3-4771-91F1-AF042E94617F
Item 2 is an item for possible action. Items 1 and 3 through 7 are discussion items and no action can be taken. Please be advised that the Bus Shelter and Bench Advisory Committee has the discretion to take items on the agenda out of order, combine two or more agenda items for consideration, remove an item from the agenda or delay discussion relating to an item on the agenda any time.

1. CONDUCT A COMMENT PERIOD FOR CITIZENS PARTICIPATION

2. APPROVAL OF THE MINUTES: Meeting of October 18, 2018 (FOR POSSIBLE ACTION)

3. RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA’S RECENT SERVICE CHANGE

4. RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA’S PARTNERSHIP WITH LYFT AND FANATICS

5. RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE CLARK COUNTY SCHOOL DISTRICT’S STUDENTS IN TRANSITION ACCESSING RESOURCES (STAR) FAIR

6. RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE NEW FEATURES OF THE RIDERTC MOBILE APP

7. CONDUCT A COMMENT PERIOD FOR CITIZENS PARTICIPATION

During the initial Citizens Participation, any citizen in the audience may address the Committee on an item featured on the agenda. During the final Citizens Participation, any citizens in the audience may address the Committee on matters within the Committee’s jurisdiction, but not necessarily featured on the agenda. No vote can be taken on a matter not listed on the posted agenda; however, the Committee can direct that the matter be placed on a future agenda.

Each citizen must be recognized by the Chair. The citizen is then asked to approach the microphone at the podium, to state his or her name, and to spell the last name for the record. The Chair may limit remarks to three minutes’ duration, if such remarks are disruptive to the meeting or not within the Committee’s jurisdiction.

The Regional Transportation Commission of Southern Nevada keeps the official record of all proceedings of the meeting. In order to maintain a complete and accurate record, copies of documents used during presentations should be submitted to the Recording Secretary.

The Regional Transportation Commission of Southern Nevada appreciates the time citizens devote to be involved in this important process.

In compliance with Nevada Revised Statute 241.035(4), the Regional Transportation Commission of Southern Nevada shall create an audio and/or video recording of the meeting and retain such recording(s) for the required period of time.

The Regional Transportation Commission of Southern Nevada Meeting Room and Conference Room are accessible to the disabled. Assistive listening devices are available for the hearing impaired. A sign language interpreter for the deaf will be made available with a forty-eight hour advance request to the Regional Transportation Commission of Southern Nevada offices. Phone: (702) 676-1500 TDD (702) 676-1834

Any action taken on these items is advisory to the Regional Transportation Commission of Southern Nevada.
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

AGENDA ITEM

<table>
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<tr>
<th>Metropolitan Planning Organization</th>
<th>Transit</th>
<th>Administration and Finance</th>
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<tbody>
<tr>
<td>SUBJECT: CITIZENS PARTICIPATION</td>
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| PETITIONER: TINA QUIGLEY, GENERAL MANAGER  
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA |         |                           |
| RECOMMENDATION BY PETITIONER:  
THAT THE BUS SHELTER AND BENCH ADVISORY COMMITTEE CONDUCT A COMMENT PERIOD FOR CITIZENS PARTICIPATION |         |                           |
| GOAL: ENHANCE PUBLIC AWARENESS AND SUPPORT OF THE REGIONAL TRANSPORTATION SYSTEM |         |                           |

FISCAL IMPACT:

None

BACKGROUND:

In accordance with State of Nevada Open Meeting Law, the Regional Transportation Commission of Southern Nevada (RTC) Bus Shelter and Bench Advisory Committee (Committee) shall invite interested persons to make comments. For the initial Citizens Participation, the public should address items on the current agenda. For the final Citizens Participation, interested persons may make comments on matters within the Committee’s jurisdiction, but not necessarily on the current agenda.

No action can be taken on any matter discussed under this item, although the Committee can direct that it be placed on a future agenda.

Respectfully submitted,

M.J. MAYNARD
Deputy General Manager

BSBAC Item #1
December 20, 2018
Non-Consent
MINUTES
BUS SHELTER AND BENCH ADVISORY COMMITTEE
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA
OCTOBER 18, 2018

These minutes are prepared in compliance with NRS 241.035. Text is in summarized rather than verbatim format. For complete contents, please refer to meeting recordings on file at the Regional Transportation Commission.

THIS MEETING WAS PROPERLY NOTICED AND POSTED IN THE FOLLOWING LOCATIONS ON OCTOBER 10, 2018

Clark County Government Center
500 S. Grand Central Pkwy.
Las Vegas, NV 89155

City of Henderson
Office of the City Clerk
240 Water Street
Henderson, NV 89015

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Las Vegas, NV 89155

RTC
600 S. Grand Central Pkwy.
Las Vegas, NV 89106

RTC website
www.rtcsnv.com

Nevada Public Notice
https://notice.nv.gov

CALL TO ORDER
Ms. Erin Breen, Chair, called the meeting to order at 3:05 p.m. in Meeting Room 108 of the Regional Transportation Commission of Southern Nevada Administration Building.

MEMBERS PRESENT:
Erin Breen, Chair
Shannon Ahartz, Vice-Chair
Audrey Asselin
Briceida Castro
Bill Redfairn
Rick Skipton

MEMBERS ABSENT:
Robert Lee
Chris Lujan
Sgt. Robert Stauffer
Michael Wadley

RTC STAFF:
CarlScarborough, Director of Transit Advertising and Amenities
Ellen Marcial, Manager of Transit Advertising and Amenities
Nathan Goldberg, Manager of Transit Planning
Wycliffe Mudambi, Manager of Fixed Route Operations
Scott Edelblute, Transit Amenities Supervisor
Aileen Magnera, Advertising and Creative Supervisor
Marin DuBois, Management Analyst
Monika Bertaki, Public Affairs Administrator

INTERESTED PARTIES:
Ken Ackeret, Kimley-Horn
Det. Stephen Baker
Joe Podegracz, Kimley-Horn
Niel Rohleder, Sierra Transportation and Technology
Rick Rosen

BSBAC Item #2
December 20, 2018
<table>
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<tr>
<th>Item:</th>
<th>1. CONDUCT A COMMENT PERIOD FOR CITIZENS PARTICIPATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
<td>No comments were made.</td>
</tr>
<tr>
<td>Motion:</td>
<td>No motion was necessary.</td>
</tr>
<tr>
<td>Vote/Summary:</td>
<td>No vote was taken.</td>
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<thead>
<tr>
<th>Item:</th>
<th>2. APPROVAL OF THE MINUTES: Meeting of August 16, 2018 (FOR POSSIBLE ACTION)</th>
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<tbody>
<tr>
<td>Comments:</td>
<td>No comments were made.</td>
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<tr>
<td>Motion:</td>
<td>Mr. Shannon Ahartz made a motion to approve the minutes.</td>
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<tr>
<td>Vote/Summary:</td>
<td>5 Ayes. 0 Nays. The motion carried.</td>
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<tr>
<td>Ayes:</td>
<td>Shannon Ahartz, Erin Breen, Briceida Castro, Bill Redfairn, Rick Skipton</td>
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<tr>
<td>Nays:</td>
<td>None</td>
</tr>
<tr>
<td>Absent:</td>
<td>Audrey Asselin, Robert Lee, Chris Lujan, Robert Stauffer, Michael Wadley</td>
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<tr>
<th>Item:</th>
<th>3. RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE UPCOMING REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA’S SERVICE CHANGE</th>
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| Comments: | Following a detailed PowerPoint presentation [attached], Mr. Nathan Goldberg, Manager of Transit Planning for the Regional Transportation Commission of Southern Nevada (RTC), updated the Bus Shelter and Bench Advisory Committee (BSBAC or Committee) on the RTC’s service changes. He remarked how the planned service change, occurring on December 2, 2018, would be modest compared to previous years. He noted how the fiscal impact would only be a one percent increase. The changes feature several geographical adjustments to routes and frequency changes to nine routes. Mr. Goldberg also detailed that schedule changes were being made to nearly all routes in the network, with the two exceptions of Route 104 and Route 117. Next, Mr. Goldberg explained that there were two projects for changing the bus stops, the first of which involved eliminating stops with very low ridership. He stated that there are about 20 of these stops system wide that would be removed. Second, he explained the ongoing efforts working towards a bus stop balancing project, with the goal of making the distance between stops more equitable. There are about 20 stops that are being re-distanced in this manner.

Ms. Ellen Marciel, Manager of Transit Advertising and Amenities for the RTC, asked Mr. Goldberg to clarify what was meant by the term service change. Mr. Goldberg explained that the RTC assesses the fixed route service annually to determine if and where changes should be made. These can include changes to schedules, adding stops, removing stops, and more. These alterations need to be completed on a set schedule due to their complexity. The RTC has determined that the time period around early December is the best time to make these changes each year. |
Mr. Rick Skipton asked if these assessments include cost reviews for pricing and fares. Mr. Goldberg said that had more to do with fiscal year assessments. Mr. Carl Scarbrough, Director of Transit Advertising and Amenities for the RTC, agreed and said that fare changes are usually done alongside market surveys, though these do not occur often.

Next, Ms. Briceida Castro asked about the 20 stops that were eliminated and which stops these included. Mr. Goldberg said he could get those exact details to her. Chair Breen questioned whether notifications are put up near these stops to notify riders that the stops would be eliminated. Mr. Goldberg confirmed this, describing that after the item receives final approval at the November RTC Board of Commissioners meeting, staff will begin sending information out to the public. Signage will be made to let riders know about the changes, and fleet-wide rider alerts will be included as well.

Mr. Skipton asked whether there are 40 stops being removed in total. Mr. Goldberg said the 20 being “balanced” was a bit more nebulous, as they are being moved up and down the streets, not necessarily completely removed. However, more consideration will be given to stops that have full shelters.

**Vote/Summary:**
No vote was taken.

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**Item:**
4. RECEIVE AN RECAP OF THE INTERSTATE-11 GRAND OPENING

**Comments:**
Following a detailed PowerPoint presentation [attached], Ms. Monica Bertaki, Public Affairs Administrator for the Regional Transportation Commission of Southern Nevada (RTC), recapped the Interstate-11 (I-11) grand opening. She explained that in August 2018, the RTC and the Nevada Department of Transportation (NDOT) celebrated the opening of I-11 in Boulder City. Over 500 community members attended this event. The opening of the highway was the first step in bridging Las Vegas and Phoenix, Arizona – the only two remaining metropolitan areas with populations of more than one million not currently linked by an interstate. This made the opening of I-11 a historic moment for the region. She thanked the contractors who were sponsors for the project, Las Vegas Paving, Fisher Sand and Gravel, and 4Leaf Consulting. Ms. Bertaki then played a brief video for highlighting the event.

Bus Shelter and Bench Advisory Committee (Committee) members also praised the event. Mr. Rick Breen noted there was a bicycle ride of 500 participants that rode the length of the route. Chair Erin Breen added that bike rides like this kick off every big opening in the area, noting it is a great tradition. Mr. Carl Scarbrough, Director of Transit Advertising and Amenities for the RTC, asked if Ms. Bertaki had heard any updates from Arizona since the opening. Ms. Bertaki believed Arizona is in the final stages of an environmental assessment, projected to conclude next year. After that, a decision for the final alignment will be made. Chair Breen confirmed that per recent comments from Congresswoman Dina Titus, this was the correct status of Arizona’s progress.

Mr. Skipton asked if the route had been finalized from Phoenix to Las Vegas. Ms. Bertaki said the route that had been opened runs from Boulder City to the Arizona border. The routes north of that are being oversee by NDOT, who was holding public meetings to gather suggestions for the alignment to be presented in the following year.

Chair Breen asked how much of this recent opening was the RTC’s responsibility. Ms. Bertaki replied that the RTC had jurisdiction of 12.5 miles, with NDOT having the rest. This was because the RTC does not typically build interstates, but there was legislation in 2012 that required fast-tracking of the project.
which required that the RTC to take on this part of the construction.

**Motion:**
No motion was necessary.

**Vote/Summary:**
No vote was taken.

**Item:**
5. RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE BUS STOP SHELTER LIGHTING IMPROVEMENT PROJECT

**Comments:**
Following a detailed PowerPoint presentation [attached], Ms. Ellen Marciel, Manager of Transit Advertising and Amenities for the Regional Transportation Commission of Southern Nevada (RTC) reported on the bus stop shelter lighting project. First, she described the RTC’s efforts in improving bus stop shelter lighting. She explained that the Federal Transit Administration (FTA) funds much of the RTC’s projects, including safety enhancements. This includes bus stop shelter lighting. Thus, the RTC received a grant to improve the lighting on shelters in the area. This project encompasses the following areas: the Strip and Downtown Express (SDX), the Boulder Highway Express (BHX), Henderson and Downtown Express (HDX), Sahara Avenue, Flamingo Road, and General Market shelters. Furthermore, she said that this is a large project that will affect most of the shelters throughout the Las Vegas Valley. Due to its scope, it was divided into smaller packages to let different companies bid on them. The General Market package will need to be handled by a larger contractor, but the other packages will be distributed to smaller contractors.

Ms. Marciel then described the improvements in detail as follows:
- **SDX and BHX shelters:** These are wired through a power pedestal through NV Energy, providing the RTC information on what type of uses can be included in the area. Fluorescent lights will be removed and replaced with LED lights, along with additional lighting placed behind the shelters. Existing security lighting will also be switched to more efficient LED lights.
- **Sahara Avenue:** Demolish existing solar panel system and replace with more efficient solar system. Decrease the number of solar batteries in use. Replace edge lighting in advertising panel with new hard strip LEDs. Install new high efficiency LED lights at rear of shelter. Remove existing security lights and replace with new LED lights.
- **Flamingo Road:** These are newer stops and require less adjustment overall, with the only changes proposed being the addition of new LED security lights placed at the rear of each shelter.
- **General Market Improvements:** There are over 800 of these shelters in use, with several updates proposed. Replace two older controllers inside the advertising box with one new one. Install new high efficiency LED lights at rear of shelter. Install fuse and fuse holder for new light inside the advertising box.

Ms. Marciel highlighted the differences in the new lighting arrangements, detailing the increased security they provide. She provided images of the slimline shelters as an example, showing the benefits of the new illumination.

Chair Breen asked if the slimline shelters are solar-powered. Ms. Marciel replied affirmatively. Chair Breen noted that in the images, she could not see the location of the solar battery packs. Mr. Scott Edelblute, Transit Amenities Supervisor for the RTC, noted that there are covert boxes under the roof that contain all the shelter electronics. He described the features of this box and the various customizations that each box provides for the shelters. Chair Breen then asked about the solar capabilities of each shelter and how they perform in poor lighting conditions. Ms. Marciel admitted that some of the shelters are
blocked by tree growth, but that inclement weather is not an issue. She said the RTC works with property owners to keep tree growth maintained. Mr. Carl Scarbrough, Director of Transit Advertising and Amenities for the RTC, mentioned that some of the earlier models of solar panels had experienced power issues overnight, but they had since been updated with more advanced controllers to improve efficiency. He also noted that some shelters were deemed too dark in customer feedback, making these issues a big priority for improvement.

Vice-Chair Shannon Ahartz asked if these improvements include converting any hard-wired shelters to solar. Ms. Marciel said they do not at this time. Then, Mr. Rick Skipton asked about the timeline for these improvements. Ms. Marciel said this would be going out to bid within the next 60 days or so, with installation slated for completion in about a year.

Chair Breen questioned whether the improvements include cover lights as well. Mr. Marciel said they do, totaling about 300 overall. This means that even places without shelters will receive improved lighting.

**Motion:**
No motion was necessary.

**Vote/Summary:**
No vote was taken.

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**Item:**
6. RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE BUS STOP BOLLARDS PILOT PROGRAM

**Comments:**
Following a detailed PowerPoint presentation [attached], Mr. Ken Ackeret, Kimley-Horn, gave an overview of the bus stop bollards pilot program (pilot). He began by detailing the features of the bus stop bollards pilot program and how much of these advancements have to do with improving safety for people waiting at bus stops and shelters. It is common for near misses and traffic crashes to occur near these stops, so new solutions are needed to keep waiting riders safe. Over the past few years, he continued, there has been a big shift in roadside safety concerns. Previous roadside barriers were designed more to keep vehicular passengers safe, but these new options were designed to protect roadside pedestrians.

Mr. Ackeret said that bollards are the preferred protection method for roadways and bus shelters, placed eighteen inches back from the road. He explained that vehicles come equipped with many safety features to protect riders from collision damage, but there needs to be better protections for pedestrians from hostile vehicles. Thus, the bollard pilot program is being implemented. The pilot program involves installing bollards at up to 20 different bus stops throughout the Las Vegas Valley based on specific criteria that includes the following: Roadway vehicle volume per day (VPD) adjacent to a bus stop; adjacent roadway vehicle speeds at bus stop; bus stop ridership volume; frequency of bus service; and sidewalk and bus stop shelter geometry.

Mr. Ackeret then reviewed the characteristics of the bollard design. Each is based off American Society for Testing and Materials (ASTM) standards, with each bollard rated to stop a 15,000-pound vehicle traveling 50 miles per hour (mph) with less than 3.3 feet of penetration. This includes vehicles the size of “box” trucks, including UPS-sized vehicles or delivery trucks driving around town. Larger vehicles would be stopped, but they may exceed the aforementioned penetration rate.

Chair Erin Breen asked for clarification on what penetration means. Mr. Ackeret replied that it means that the colliding vehicle would travel no more than 3.3 feet into the “protected” area. Chair Breen pointed out that if a car going 50 mph would collide with a bollard, there might be debris flying off that could put
Chair Breen pointed out that these types of collisions are not limited to bus stops, either, noting that fatalities occur from cars hitting pedestrians on the sidewalk. Mr. Ackeret acknowledged this point, stating that these are the types of conversations that need to come out of the pilot program assessment. The efforts of the pilot program are just a starting point, and many other cities are ahead of Las Vegas in this regard. However, this is a good first step for identifying high-risk locations for these safety concerns.

Mr. Rick Skipton asked if there were any incidents where a bollard was severed by a collision and caused damage to nearby pedestrians. Mr. Ackeret replied that different bollards are held to different testing standards, and these bollards were tested to ASTM standards to stay secure within the noted specifications. The bollards should not be shearing off in these situations. He briefly reviewed the different types of bollard installations that are available and how they reduce the force of collisions, noting that they are very strong overall.

Ms. Audrey Asselin praised these efforts, but mentioned that the most vulnerable stops do not have room to include bollards. She referred to the efforts of moving stops back away from the road, pointing out that the most vulnerable stops are in that five-foot range. She wondered if any of those sites are being considered for bollards or are the newer stops that have more room only being considered. Mr. Ackeret replied that where the shelter is located and the available space is part of the selection criteria. However, he noted that this was a good point to bring up, and moving shelters back was always a preferable option when possible. Ms. Asselin then asked if it is possible to place the bollards in specific locations near stops to maximize the chances that pedestrians will be kept safe. Mr. Ackeret agreed that the potential best places for bollards is an important issue, but there are many scenarios to consider. The efficiency and economic viability of each scenario must be evaluated, which is data that will be provided by the pilot program. Then, Ms. Asselin asked if these bollard locations have been selected yet. Mr. Ackeret replied that the sites had not been chosen. This presentation was an introduction to the project and designed to solicit feedback and raise awareness.

Mr. Skipton asked for more detail about the site selection criteria and whether bollards would be placed on streets with traffic moving faster than 50 mph. Mr. Ackeret replied that the 50-mph option was just a starting point, and the options may eventually be extended to the other arterials. He said these options are being considered and intended to be part of plans for future testing.

Mr. Skipton then asked about other ASTM standards that have been considered. Mr. Joe Podegracz, Kimley-Horn, mentioned that these options are some of the strongest bollards available on the market, and stronger bollards would be too disruptive in terms of size and installation. He explained that there has to be a balance between installation and utility relocations and Public Access Right-of-Way Guidelines (PROWAG).

Mr. Bill Redfairn noted that the bollard issue has been brought up often in the past, with the Bus Shelter and Bench Advisory Committee (Committee) usually agreeing that bollards are not the optimal solution. He asked what has changed that make bollards such a good option for the Regional Transportation
Commission of Southern Nevada (RTC) at this time. Mr. Carl Scarbrough, Director of Transit Advertising and Amenities for the RTC, discussed how bollard technology had changed to make them more effective and safer. The RTC has also started to exhaust its options in moving shelters back. He pointed out that while there are still issues to discuss, the RTC Board of Commissioners authorized staff to negotiate with Kimley-Horn for the pilot. He believed this is a natural next step to addressing some of these problems. Mr. Redfairn asked if Mr. Scarbrough was stating that the RTC had done everything in its power to improve the problem and that the next logical step was exploring physical barriers. Mr. Scarbrough said the RTC had done everything it could reasonably do in this situation as it has limited abilities to control driver behavior. Mr. Redfairn agreed that there are simply no options for some of the bus shelters and conceded that these discussions make sense. However, he reiterated that there would be much pushback on this issue from others, so the Committee members would need to be ready to defend this solution as a next step. Mr. Scarbrough agreed and said it is prudent to examine the issue in more depth.

Chair Breen recounted a recent fatality that had occurred on Washington Avenue, reminding everyone that there are numerous shelters to consider in these types of situations. In previous studies, it was usually agreed that physical barriers are a last resort. It was good to test these issues in a pilot, but it would be important to test different configurations and different options to learn how to best effect changes, should the bollards be necessary. This would be an important foundation for other issues, such as requests for road changes or decreased speed limits that would function as better safety enhancements in the system overall. Generally, Chair Breen wanted to see these improvements, but was concerned about the public backlash when crashes do occur.

Ms. Asselin added that it is hard to quantify how many lives these improvements have saved. She asked if Kimley-Horn is getting updates from those who are already testing these strategies in real-time. Mr. Ackeret said the issues are moving fast and that other agencies are also looking into these solutions. It is difficult to quantify the impacts of these issues and solutions. This type of analysis is what the pilot program is for.

Ms. Asselin brought up the issue of metal railings and street art and the potential damage they could cause when crashes occur. She asked if there had been changes in traffic engineering that made these types of obstacles more acceptable. Mr. Ackeret replied that there have been some philosophical changes in how the street environment is perceived, with pushes for space to be better allocated to roadway users of all kinds. Overall, vehicle users are not the biggest priority in all these issues. Chair Breen added that metal art on the roadways often has a traffic calming effect because of their aesthetic appeal.

Mr. Redfairn mentioned that while the Strip is important, it is quite different from other areas and other routes where the bus stops are. He cautioned that it was vital to assess how improvements on the Strip may or may not be successful in other areas.

Mr. Ackeret brought the discussion back to site selection, noting that traffic volume is a big priority, along with speed along the routes. He agreed that different speed roads would have an influence on the effectiveness of solutions, and it would be factored into site selection. Of course, PROWAG and Americans with Disabilities Act (ADA) requirements are considered as well. He assured the Committee that the selection process will be carefully considered, including feedback from the agencies.

Mr. Skipton asked about the overall goal of the pilot project and whether it is intended to solicit information for use in other areas. Mr. Ackeret confirmed that it is a discovery process and that the goal is to find recommendations that will satisfy the Las Vegas community. This began with the bollard solution,
but there might need to be adjustments to the process. No options are being set forth yet. This is an opportunity to collect information on what solutions would be most feasible. Mr. Skipton then asked how the success of the program would be measured, as it seemed like it would require years of study to determine. Mr. Ackeret replied that, like moving shelters back, nonevents are considered successes. Overall, it is meant to reduce incidents as much as possible.

Mr. Skipton asked that if the initial timeline was 11 months, how long would the program be monitored before official recommendations are supposed to be made. Mr. Ackeret said that the Committee will help in this process, along with assessing the general feel of the public on these improvements. Ridership metrics could be assessed to determine the impacts as well. Chair Breen noted it would be helpful for the Committee to receive regular updates and discuss options and other configurations. Mr. Scarbrough agreed that these issues need to be addressed and that there will be a lot to take in. There will need to be a lot of public buy-in from various jurisdictions. It will end up being a site-by-site application of these solutions.

Chair Breen then asked if they are assessing each of the entities and spreading the bollards across Henderson, North Las Vegas, and other regions. Mr. Scarbrough said that equity across entities will be important to look at for the design and public review processes. Mr. Podegracz agreed and said it will be important to design the bollards properly to accommodate each region.

Mr. Redfairn suggested another way to measure success. He asked if there could be 24-hour video surveillance on some of the bollard placements to give the agencies more data on how nearby residents are interacting with the installations. Mr. Scarbrough said that bus video could capture a portion of this, though he was unsure about placing a camera out there 24/7. Mr. Redfairn mentioned that the Freeway and Arterial System of Transportation has the potential to record this information and that it may be willing to lend support.

Detective Stephen Baker praised the idea of the program, but wanted to know what will happen when a fatal collision occurs in the bollard system. He asked whether the RTC will be prepared to defend the bollard system if a fatality does occur. Mr. Scarbrough and Chair Breen agreed it was a good question and said it will need to be addressed in the pilot considerations.

Ending the discussion, Mr. Ackeret recounted that challenges of implementing a bollard system were considered and would require additional thought, particularly when placing bollards to meet different roadway configurations. He provided several images showing how vehicles would interact with the bollards should a collision occur and how the bollard will be fit into different locations while maintaining PROWAG compliance.

Chair Breen asked if some sort of chain system to prevent pedestrians from entering between them and crossing lanes could be installed. Mr. Ackeret said that chains are hazardous, but that there are some hooped systems in place that could prevent this type of pedestrian activity. Chair Breen stated that these types of solutions would be effective for certain areas, though perhaps not all of them.

**Motion:**
No motion was necessary.

**Vote/Summary:**
No vote was taken.
**Item:**
7. RECEIVE AN INFORMATIONAL PRESENTATION REGARDING CRASH DATA

**Comments:**
Chair Erin Breen explained that this item would be presented at a future meeting. Mr. Rick Skipton asked if there was backup or additional data that the Bus Shelter and Bench Advisory Committee (Committee) members should have for this item. Mr. Carl Scarbrough, Director of Transit Advertising and Amenities for the Regional Transportation Commission of Southern Nevada, explained that the discussion at the present meeting will give staff some direction with what data to provide to the Committee.

**Motion:**
No motion was necessary.

**Vote/Summary:**
No vote was taken.

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**Item:**
8. CONDUCT A COMMENT PERIOD FOR CITIZENS PARTICIPATION

**Comments:**
No comments were made.

**Motion:**
No motion was necessary.

**Vote/Summary:**
No vote was taken.

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**ADJOURNMENT**

The meeting adjourned at 4:33 p.m.

Respectfully submitted,

[Signature]

Marin DuBois, Recording Secretary

[Signature]

Marek Biernacinski, Transcription Secretary
RTC Fixed Route
Service Changes

Service Changes

- Sunday, Dec. 2, 2018
- Route 115 – Nellis / Stephanie
- More frequency, less wait for customers
- Routing changes on four (4) routes
- Schedule changes on majority of routes
RTC Owned Shelters - By Type
General Market

Shelter Lighting
Bus Stop Bollard Installation
Pilot Project

- Concern with the number of vehicular injuries at bus Stops
- Need to protect the waiting riders
- In the past, roadside barriers were to protect vehicular passengers not roadside pedestrians
- Over the last few years there has been a shift in roadside safety
  - Safety directed more towards pedestrians than vehicles
  - Vehicle safety improvements protect passengers
    (i.e. crumple zones, air bags, seat belts)
- Clark County has installed over 1000 bollards on Las Vegas Boulevard now protecting 11 bus stops

Bus stop #1366
(Planet Hollywood)
Site Selection

• The pilot project to install bollards at up to 20 bus stops throughout the Las Vegas Valley

• Selection Criteria:
  • Roadway Vehicle Volume per Day (VPD) adjacent to bus stop
  • Adjacent roadway vehicles speeds at bus stop
  • Bus stop ridership volume
  • Frequency of bus service
  • Sidewalk and bus stop shelter geometry

Bollard Concept

• SHALE MOUNT BOLLARDS
  • ASTM F 2656 M50 P1 rated (Strip Bollards)
    • 15,000 lb vehicle traveling 50 MPH with less than 1 meter (3.3 feet) of penetration
    • Can be placed within existing sidewalk (8’-10’ MIN)
    • 12” depth of removal, limits utility conflicts
    • Distance between bollards meet 48” PROWAG clearance
    • Allows for bus ADA ramp access
    • Quick installation limiting bus stop closure time

Bus Stop #1332 (Paris)
Bus Stop Concept Layout

SDX Bus at Paris Bus Stop
Schedule

<table>
<thead>
<tr>
<th>TASKS</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notice to Proceed (NTP)</td>
<td>-</td>
</tr>
<tr>
<td>Site Selection</td>
<td>2 Months</td>
</tr>
<tr>
<td>Survey</td>
<td>1 Month</td>
</tr>
<tr>
<td>Develop Plans and Specifications</td>
<td>3 Months</td>
</tr>
<tr>
<td>Permits</td>
<td>3 Months</td>
</tr>
<tr>
<td>Bollard Installation</td>
<td>2 Months</td>
</tr>
<tr>
<td></td>
<td><strong>11 Months Total Duration</strong></td>
</tr>
</tbody>
</table>

Questions

Ken Ackeret, Ph.D., P.E., PTOE

6671 Las Vegas Blvd South, Suite 320
Las Vegas, NV 89119
Direct: 702-862-3601
AGENDA ITEM

SUBJECT: SERVICE CHANGE 2018

PETITIONER: TINA QUIGLEY, GENERAL MANAGER
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

RECOMMENDATION BY PETITIONER:
THAT THE BUS SHELTER AND BENCH ADVISORY COMMITTEE (BSBAC) RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA’S RECENT SERVICE CHANGE

GOAL: ENHANCE PUBLIC AWARENESS AND SUPPORT OF THE REGIONAL TRANSPORTATION SYSTEM

FISCAL IMPACT:

None

BACKGROUND:

Annually, the Regional Transportation Commission of Southern Nevada (RTC) updates routes and schedules, also known as a service change, in order to maintain operational efficiencies. This year’s service change occurred on Sunday, December 2, 2018. Staff from the RTC will highlight and recap the major changes.

Respectfully submitted,

M.J. MAYNARD
Deputy General Manager

Respectfully submitted,

M.J. MAYNARD
Deputy General Manager

BSBAC Item #3
December 20, 2018
Non-Consent
**SUBJECT:** LYFT/FANATICS PARTNERSHIP  

**PETITIONER:** TINA QUIGLEY, GENERAL MANAGER  
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA  

**RECOMMENDATION BY PETITIONER:** THAT THE BUS SHELTER AND BENCH ADVISORY COMMITTEE (BSBAC) RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA’S PARTNERSHIP WITH LYFT AND FANATICS  

**GOAL:** ENHANCE PUBLIC AWARENESS AND SUPPORT OF THE REGIONAL TRANSPORTATION SYSTEM  

**FISCAL IMPACT:**  
None  

**BACKGROUND:**  
The Regional Transportation Commission of Southern Nevada (RTC) partnered with ride-sharing company Lyft and sportswear manufacturer Fanatics in an effort to improve mobility for employees at the new Fanatics facility in North Las Vegas. RTC staff will provide an overview of the partnership and report on the success of the program thus far.

Respectfully submitted,  

M.J. MAYNARD  
Deputy General Manager  

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**BSBAC Item #4**  
**December 20, 2018**  
Non-Consent
REGионаl tранспортный комитет
об южной Неваде

AGENDA ITEM

Metropolitan Planning Organization [ ] Transit [ ] Administration and Finance [X]

SUBJECT: CCSD STAR FAIR

PETITIONER: TINA QUIGLEY, GENERAL MANAGER
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

RECOMMENDATION BY PETITIONER:
THAT THE BUS SHELTER AND BENCH ADVISORY COMMITTEE (BSBAC) RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE CLARK COUNTY SCHOOL DISTRICT’S STUDENTS IN TRANSITION ACCESSING RESOURCES (STAR) FAIR

GOAL: ENHANCE PUBLIC AWARENESS AND SUPPORT OF THE REGIONAL TRANSPORTATION SYSTEM

FISCAL IMPACT:

None

BACKGROUND:
The Clark County School District’s (CCSD) Students in Transition Accessing Resources (STAR) Fair is a program that brings together vendors and students to provide information to students who need additional assistance transitioning from high school to adulthood. For the third year, the Regional Transportation Commission of Southern Nevada (RTC) hosted the STAR Fair at its Mobility Training Center. RTC staff will provide information regarding the STAR Fair.

Respectfully submitted,

M.J. MAYNARD
Deputy General Manager

BSBAC Item #5
December 20, 2018
Non-Consent
**REGIONAL TRANSPORTATION COMMISSION**
**OF**
**SOUTHERN NEVADA**

**AGENDA ITEM**

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<th>Metropolitan Planning Organization</th>
<th>Transit</th>
<th>Administration and Finance</th>
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**SUBJECT:** RIDERTC MOBILE APP UPDATE

**PETITIONER:** TINA QUIGLEY, GENERAL MANAGER
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

**RECOMMENDATION BY PETITIONER:**
THAT THE BUS SHELTER AND BENCH ADVISORY COMMITTEE (BSBAC) RECEIVE AN INFORMATIONAL PRESENTATION REGARDING THE NEW FEATURES OF THE RIDERTC MOBILE APP

**GOAL:** ENHANCE PUBLIC AWARENESS AND SUPPORT OF THE REGIONAL TRANSPORTATION SYSTEM

**FISCAL IMPACT:**
None

**BACKGROUND:**
The Regional Transportation Commission of Southern Nevada (RTC) developed and launched a mobile app last year called rideRTC. The app allows passengers to use their smart phones to securely purchase transit passes for all RTC routes, plan their trip, and find their bus in real time. The rideRTC app has been updated with two new features: Transit Watch and Transit+. RTC staff will present the new features.

Respectfully submitted,

M.J. MAYNARD
Deputy General Manager

BSBAC Item #6
December 20, 2018
Non-Consent
**REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA**

**AGENDA ITEM**

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<th>Transit</th>
<th>Administration and Finance</th>
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**SUBJECT:** CITIZENS PARTICIPATION

**PETITIONER:** TINA QUIGLEY, GENERAL MANAGER
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

**RECOMMENDATION BY PETITIONER:**
THAT THE BUS SHELTER AND BENCH ADVISORY COMMITTEE CONDUCT A COMMENT PERIOD FOR CITIZENS PARTICIPATION

**GOAL:** ENHANCE PUBLIC AWARENESS AND SUPPORT OF THE REGIONAL TRANSPORTATION SYSTEM

**FISCAL IMPACT:**

None

**BACKGROUND:**

In accordance with State of Nevada Open Meeting Law, the Regional Transportation Commission of Southern Nevada (RTC) Bus Shelter and Bench Advisory Committee (Committee) shall invite interested persons to make comments. For the initial Citizens Participation, the public should address items on the current agenda. For the final Citizens Participation, interested persons may make comments on matters within the Committee’s jurisdiction, but not necessarily on the current agenda.

No action can be taken on any matter discussed under this item, although the Committee can direct that it be placed on a future agenda.

Respectfully submitted,

M.J. MAYNARD
Deputy General Manager

BSBAC Item #7
December 20, 2018
Non-Consent