City of Tucson ID 9033
Title VI Triennial
Program

CITY OF TUCSON

Title VI Program

Prepared by Sun Tran for the City of Tucson, August 2022.

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Introduction

The City of Tucson, Title VI Transit Triennial Program, follows the Federal Transit Administration's Title VI Circular, C 4702.1B checklist as required by the U.S. Department of Transportation's Title VI regulations for transit providers that operate 50 or more fixed route vehicles in peak service and are located in urbanized areas (UZA) of 200,000 or more people. In conjunction with the Title VI Circular, the City of Tucson's Title VI program also follows the Federal Transit Administration's Environmental Justice Circular, C 4703.1 and incorporates environmental justice principles into plans, projects, and activities that receive funding from the Federal Transit Administration. Sun Tran's primary mission is to improve the community's quality of life by providing safe, efficient, dependable, customer-focused public transportation. Access to efficient clean transportation brings equity discussions to the forefront. Reducing the effects of climate change and improving air quality benefit both low-income and minority communities with improved transportation options. This entire program is just one of the many ways that the City of Tucson with Sun Tran, Sun Van, and Sun Link bring equity discussions and solutions to the forefront of public transportation

Sun Tran, Sun Van, and Sun Link are the City of Tucson's public transportation system. In 1969, the City of Tucson agreed to assume control of Tucson Rapid Transit's struggling system. Under the City of Tucson's direction, public transit began to flourish. Ridership increased, new buses were purchased and service rapidly improved. In 1975, a contest was held, and the system was renamed Sun Tran. In 1978, Sun Tran purchased the Roy Laos bus company, which operated on the south and west sides of Tucson, consolidating transit in Tucson to single public transit system. Today, Sun Tran operates 41 fixed routes, 29 local routes and 12 express routes, and the award-winning system remains on the forefront of technology as it has since the beginning. Sun Tran utilizes Compressed Natural Gas, Biodiesel, electric or hybrid technologies for all vehicles in the fleet.

Sun Van is Tucson's award-winning regional paratransit system, providing transportation services to those individuals unable to use Sun Tran's fixed route service due to their disability. Operating since 1987, and originally named Van Tran, Sun Van provides paratransit services in Tucson, Tohono O'odham Nation, Pascua Yaqui Tribe, South Tucson, and part of Pima County in compliance with the Americans with Disabilities Act of 1990 (ADA).

The Sun Link streetcar route is 3.8 miles long, connecting the west side of downtown with the University of Arizona (U of A), and was part of the $2.1 billion Regional Transportation Plan approved by Pima County voters in May 2006. In 2010, the City of Tucson was awarded a $63 million Transportation and Infrastructure Generating Economic Recovery (TIGER) grant from the Federal Transit Administration (FTA). The project was completed with multiple federal, state, and local funds. The fixed-guideway electric rail system has eight ADA-compliant vehicles, sharesa travel lane with other vehicles, and is compatible with on-street parking. The streetcars accommodate bicycles and have easy roll-on access for mobility devices and strollers.

The City of Tucson receives Federal funding in accordance with Chapter 53 of Title 49 of the United States Code, as amended by the Fixing America's Surface Transportation (FAST) Act. As a recipient of these funds, Sun Tran, Sun Van, and Sun Link comply with regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21 (hereinafter referred to as the Regulations), as they may be

amended from time to time. As such, the City is required to submit a Title VI Program and follow the requirements and guidelines of FTA Circular C 4702.1B dated October 1, 2012. The Title VI Program must be submitted to the FTA's Office of Civil Rights every three (3) years. Title VI is a Federal statute and provides that no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

Sun Tran, Sun Van, and Sun Link are committed to the following:

1. Ensuring that the level and quality of transit service is provided without regard to race, color, or national origin, Identifying and addressing, as appropriate, disproportionately high and adverse humanhealth and environmental effects, including social and economic effects of programs and activities on minority populations and low-income populations.

2. Promoting the full and fair participation of all affected populations in transit decision making.

3. Preventing the denial, reduction, or delay in benefits related to programs and activities that benefit minority populations or low-income populations; and

4. Ensuring meaningful access to programs and activities by persons with Limited English Proficiency (LEP).

Policy Statement

The City of Tucson has hired RATP Dev to manage and maintain its transit services (Sun Tran, Sun Van, and Sun Link). RATP Dev is committed to complying with the requirements of Title VI in all federally funded programs. The City of Tucson Department of Transportation (TDOT), Transit Services Division follows the TDOT's Policy/Procedure Bulletin, Number 12.01, revised/reviewed 9/10/2013, to ensure that public involvement is included in all public transit decisions under the Title VI requirements and the Environmental Justice guidelines. Effective public involvement will enable the City of Tucson to develop systems, services, and solutions to address transit service needs, specifically those of minority and low-income residents and neighborhoods.

Sun Tran, Sun Van, and Sun Link display the Title VI policy (below) on all transit vehicles, public locations of the administrative offices, and brochures, including "how to ride" and schedule ride guides.

Title VI Policy for Sun Tran, Sun Van, Sun Shuttle and Sun Link:

Public transit services are provided without regard to race, color or national origin. If you would like additional information on Sun Tran, Sun Van, Sun Shuttle and/or Sun Link's nondiscrimination obligations or would like to file a complaint, please call (520) 792-9222 (or TDD: (520) 628-1565).

Requirement to Provide an Annual Title VI Certification and Assurance

(CHAPTER III-1, Number 2)

A copy of the Federal Fiscal Year 2019 FTA Certifications and Assurances Signature page is found in **Appendix A** of this document.

Requirement to Prepare and Submit a Title VI Program

(CHAPTER III-1, Number 4)

Fulfilled in this document.

Requirement to Notify Beneficiaries of Protection under Title VI

(CHAPTER III-4, Number 5)

□ Title VI Notice to the Public, including a list of locations where the notice is posted

The City of Tucson publishes and posts the following statement in English and Spanish to notify beneficiaries of their rights under Title VI at the Sun Tran, Sun Van, and Sun Link Administrative Offices, Special Services Office, all transit centers, on all transit vehicles (bus, paratransit, and streetcar), all transit websites, in bi-annual ride-guides (schedules), and Sun Van brochures.

> *Public transit services are provided without regard to race, color or national origin. If you would like additional information on Sun Tran, Sun Van, Sun Shuttle and/or Sun Link's nondiscrimination obligations or would like to file a complaint, please call (520) 792-9222 (or TDD: (520) 628-1565) or visit suntran.com/TitleVI_Policy.php*
>
> *Se proporcionan servicios públicos de transporte sin tomar en consideración raza, color, u origen nacional. Si desea información adicional sobre las obligaciones no discriminatorias de Sun Tran, Sun Van, Sun Shuttle, y/o Sun Link favor de llamar al (520) 792-9222 (TDD: 628-1565) o visite suntran.com/TitleVI_Policy.php*

Websites

- Sun Tran: http://suntran.com/about_titleVI.php,
- Sun Van: http://www.sunvan.com/title-vi-policy-statement,
- Sun Link: http://www.sunlinkstreetcar.com/index.php?pg=62,
- TDOT: https://www.tucsonaz.gov/tdot/title-vi-civil-rights

Sun Tran:

- Administration Offices Lobby
- Sun Tran each revenue vehicle (40' Buses), two (2) posters
- "Tucson Transit User Guide" how to … brochure
- "Route Schedules" for fixed route and Sun Express

Sun Link:

- Office Lobby
- Streetcar vehicles, located behind each cab
- "Sun Link Streetcar Destinations Guide" brochure, which is in each car's literature holder

Sun Van:

- Administration Offices near reception desk and Reservations Department
- Sun Van Vehicles:
  - forward panel in revenue cutaways
  - right rear window of revenue sedans
  - left rear window of revenue minivans
- "How to Ride" brochure

Requirement to Develop Title VI Complaint Procedures and Complaint Form

(CHAPTER III-5, Number 6)

□ Title VI Complaint Procedures (i.e., instructions to the public regarding how to file a Title VI discrimination complaint)

Any individual who feels they have experienced unlawful discrimination under Title VI can submit a complaint at no charge for Sun Tran, Sun Van, Sun Link, or Sun Shuttle. All complaints must be submitted within 180 calendar days of the alleged incident. To access the complaint form, visit Sun Tran's main office, call customer service, or download the Title VI Complaint Form / Formulario de queja del Título VI (*Español*) online (https://suntran.com/PDF/ADA/Title%20VI%20Complaint%20Form%2017.pdf). Please submit complaints or questions to:

By mail or in person:
Sun Tran
Davita Mueller, Title VI Coordinator
3920 N. Sun Tran Blvd.
Tucson, AZ 85705

Call for additional information:
(520) 792-9222
TDD: (520) 628-1565

Online:
To complete the online complaint form for all services, (https://www.suntran.com/customer_comments.php). Call Customer Service for assistance with the form, or send the complaint via e-mail to: suntraninfo@tucsonaz.gov.

Title VI Complaint Guidelines

In order for Sun Tran, Sun Van, or Sun Link to investigate a complaint, the following guidelines must be met:

- The issue must be one of discrimination, and specific criteria must be met in order for Sun Tran to investigate the charge of harassment, discrimination and/or retaliation. Sun Tran staff investigates all Title VI complaints regardless of transit mode (e.g. Sun Tran, Sun Van, and Sun Link).
- It is necessary to show that persons of a different group (race, color or national origin) have been treated in a different manner that has led to a refusal or restriction of using public transportation.
- The complaint must be filed within 180 calendar days from the date of the alleged discriminatory act.

Title VI Complaint Internal Process

When customer feedback is received, the information shall be documented in Trapeze (COM) database. When a Customer Satisfaction Representative receives a Title VI complaint the following steps are also followed:

Step A.
Once the complaint is entered in Trapeze (COM), the Customer Satisfaction Representative will immediately send an email to the Director of Customer Satisfaction and Customer Satisfaction Manager making them aware of the complaint.

- If it is a Title VI complaint (e.g. race, color, or national origin), the Director of Customer Satisfaction will immediately notify by email the Title VI Coordinator, the General Manager, and Assistant General Managers of the complaint.

- The Title VI Coordinator has ten (10) business days to provide written acknowledgement of the complaint and if the complaint will be investigated by Sun Tran, Sun Van, Sun Link or Sun Shuttle. The memorandum to the complainant will identify which service will be completing the investigation.

- If a complaint is incomplete, additional information will be requested, and the Complainant will have sixty (60) days to submit the required information.

- If the investigation is delayed for any reason, the Title VI Coordinator will notify the appropriate individuals, and an extension will be requested.

Step B.
Once the investigation is completed, the Title VI Coordinator will immediately send an email to the General Manager and Assistant General Managers letting them know the outcome of the complaint.

- If it is a Title VI complaint, the General Manager will notify the RATP Dev corporate office of the complaint.

Step C.
On a monthly basis, the Director of Customer Satisfaction will include Sun Tran's Customer Satisfaction Department statistics within the Monthly Compliance Report (MCR), which is sent to the Transit Services Coordinator at TDOT. This report also lists all ADA and Title VI complaints received for the month. The Title VI Coordinator will additionally include a summary of the complaint and resolution for the MCR. This information is due to the General Manager by the 10th day of the following month.

Title VI Complaint Form

- Title VI Complaint Form

Completing the Title VI Complaint Form

The following information is provided in an effort to assist complainants in the completion of the Title VI Complaint Form / Formulario de queja del Título VI (*Español*)

1. Complete all sections of the applicable complaint form and either print or type the complaint information. In completing the form, please provide clear and concise information when describing the alleged discriminatory practice(s) and/or act(s). Incomplete forms will be returned without further processing.

2. The complaint form must be signed and dated, where indicated.

3. Please submit the completed form to Sun Tran's Office listed within the compliant form. The complaint will be reviewed and a response will be mailed. Please note the review process may take several weeks.

4. For additional information, contact the Customer Service Center at (520) 792-9222 (TDD: 628-1565).

https://suntran.com/PDF/Title%20VI%20reports/2020/Title%20VI%20Complaint%20Form%2020%20copy.pdf

sun tran sun van sun shuttle sun shuttle dial-a-ride sunLINK

Please print this form, complete and sign prior to mailing.

TITLE VI COMPLAINT FORM

I. Complaint information:

Name:
Home Address:
City: State: Zip:
Telephone: E-mail Address:

II. Are you filing this complaint on your own behalf? ❍ Yes ❍ No
*If you answered yes to this question, go to Section III

If not, please supply the name and relationship of the person for whom you are complaining:

Name: Relationship:

Please explain why you have filed for a third party:

Please confirm that you have obtained the permission of the other party if you are filing on behalf of someone else: ❍ Yes ❍ No

III. Describe how you were discriminated against as it relates to the complaint type:

On what basis do you believe you are being or have been discriminated against? *(check all that apply)*

❍ Race ❍ Color ❍ National Origin

Beginning with the most recent incident, please list events in reverse chronological order by date(s), (route & bus # if known) of occurrence. Be specific. Attach additional pages, if necessary. Please include any witnesses you wish the investigation to contact:

IV. Have you previously filed a Title VI complaint with this agency? ❍ Yes ❍ No

V. Have you filed the same/similar complaint with another agency? ❍ Yes ❍ No

If yes, please list which agencies:
Please provide contact information at the agency where the complaint was filed:

VI. Service(s) your Title VI complaint related to

❍ Sun Tran ❍ Sun Van ❍ Sun Link ❍ Sun Shuttle ❍ Sun Shuttle Dial-A-Ride ❍ Sun Shuttle Dial-A-Ride (Ora Valley)

You may attach any materials that you think is relevant to your complaint. Signature and date required below.

Sign: Date:

Please return the completed complaint form with documentation relating to this complaint to:

Sun Tran/Sun Van/Sun Link
Title VI Coordinator - Davita Mueller
3920 N. Sun Tran Blvd.
Tucson, Arizona 85705

Phone: (520) 792-9222
Email: suntraninfo@tucsonaz.gov
(use Title VI in subject line)

Rev 12/19

sun tran sun van sun shuttle sun shuttle dial-a-ride sunLINK

Por favor, imprima este formulario, complete y firme antes de enviarlo por correo.

FORMULARIO: QUEJAS DE TITULO VI

I. Información del quejante:

Nombre:
Domicilio:
Ciudad: Estado: Zona Postal:
Número de Teléfono: Correo Electrónico:

II. ¿Está presentando esta queja por sí mismo? ❍ Sí ❍ No
"Sí contestó "Sí" a esta pregunta, proceda a Sección III

Si no, favor de proveer el nombre y su relacion a la persona a quien haga usted esta queja:

Nombre: Relación:
Favor de explicar porque usted hace esta queja por otra persona:

Por favor confirma que haya obtenido el permiso de la otra persona de hacer está queja por el/ella: ❍ Sí ❍ No

III. Describa cómo fue discriminado en relación con el tipo de queja:

¿Cuál es la causa de su queja en creer ser o haber sido víctima de discriminación? (marque todos los que correspondan)

❍ Raza ❍ Color ❍ Origen Nacional

Comenzando con el incidente más reciente, por favor indique los eventos en orden cronológico inverso por fecha(s), (ruta y autobús si se conoce) de ocurrencia. Se específico. Adjunte páginas adicionales si es necesario. Incluya por favor a cualquier testigo que usted desee con quien la investigación comunique.

IV. ¿Ha presentado esta queja igual/similar ante esta agencia? ❍ Sí ❍ No

V. ¿Ha presentado esta queja igual/similar ante otra agencia? ❍ Sí ❍ No

Si así es el caso, favor de identificar cúales son las agencias:

VI. Es esta queja sobre Título VI relativa a:

❍ Sun Tran ❍ Sun Van ❍ Sun Link ❍ Sun Shuttle ❍ Sun Shuttle Dial-A-Ride ❍ Sun Shuttle Dial-A-Ride (Ora Valley)

Podría adjuntar cualquier material que considere relevante para su queja. Firma y fecha requeridas a continuación.

Firma: Fecha:

Favor de devolver el formulario completo con la documentación relacionado esta queja a:

Sun Tran/Sun Van/Sun Link
Title VI Coordinator - Davita Mueller
3920 N. Sun Tran Blvd.
Tucson, Arizona 85705

Teléfono: (520) 792-9222
Correo Electrónico: suntraninfo@tucsonaz.gov
(Use Título VI en la línea de asunto)

Rev 12/19

Requirement to Record and Report Transit-Related Title VI Investigations, Complaints, and Lawsuits

(CHAPTER III-5, Number 7)

☐ List of transit-related Title VI investigations, complaints, and lawsuits

There are no active investigations conducted by FTA and entities other than FTA.
There are no Title VI related lawsuits.

Complaints investigated by Sun Tran, Sun Van, or Sun Link related to Title VI

COM #	Contact		Resolution
81591	Email	8/06/2019	Complaint was not related to race, color, national origin, or income. It was administratively closed. However, complaint was forwarded to advertising vendor for interpretation of advertising message.
81796	Phone	8/18/2019	The complaint and video were reviewed. The complaint was administratively closed without merit.
82625	Phone	10/9/2019	Complaint was administratively closed for lack of information
82659	Website	10/11/2019	The complaint was administratively closed without merit.
83147	Phone	11/12/2019	The complaint was investigated and closed without merit.
83220	Website	11/18/2019	The complaint was investigated and closed without merit.
87073	Email	9/03/2020	The complaint was investigated and closed without merit.
87510	Phone	10/06/2020	Complaint was administratively closed for lack of information
87978	Phone	11/09/2020	Complaint was administratively closed for lack of information.

			Service was not denied, and mandatory face covering required for Covid-19.
89022	Phone	2/02/2021	Complaint was administratively closed for lack of information
89081	Phone	2/08/2021	The complaint was investigated and closed without merit.
89411	Phone	10/01/2021	The complaint was investigated and closed without merit.
92218	Phone	9/28/2021	The complaint was investigated and closed without merit.
92270	Phone	10/01/2021	The complaint was investigated and closed without merit.
95685	Phone	6/25/2022	The complaint was investigated and closed without merit.
96307	Phone	8/18/2022	The complaint was investigated and closed without merit. However, the driver was sent documentation and a reminder to board riders through the front door.

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Promoting Inclusive Public Participation

(CHAPTER III-5, NUMBER 8)

□ Public Participation Plan, including information about outreach methods to engage minority and limited English proficient populations (LEP), as well as a summary of outreach efforts made since the last Title VI Program submission

City of Tucson – Transit Public Participation Plan

There are five key goals of the Public Participation Plan for the City of Tucson's transit systems. These goals outline the importance of inclusion of various populations; the flow of information between the agency and the public, in the form of both outreach and input; the use of public input; and the effectiveness of the public involvement process. For many of the goals, objectives are also included and serve as steps to achieve the associated goals.

Goal 1: Conduct a public involvement process that ensures the opportunity for meaningful participation to all groups, including minority, low-income, disabled, seniors and limited English proficient (LEP) persons.

Objectives

- Develop partnerships with local community groups and organizations to ensure the public involvement process reaches all populations.
- Present information that is accessible to disabled, low-income, seniors and LEP persons.
- Utilize channels that reach beyond the mainstream to traditionally underserved populations.

Goal 2: Conduct public outreach and provide access to timely, relevant, and understandable information.

Objectives

- Provide timely notifications and information to the public, specifically information regarding public activities, events, and meetings.
- Select a variety of methods/techniques effectively communicating information to the public.

Goal 3: Provide opportunities for public input in decision-making.

Objectives

- Provide sufficient notice of opportunities for public involvement that are convenient to individuals who choose to provide public input relative to decision-making.
- Utilize various involvement opportunities, non-traditional engagement, and a variety of formats to encourage participation and feedback from all populations.
- Make reasonable accommodations for populations with disabilities and/or LEP.
- Provide multiple ways for attendees to provide feedback to include mail, phone, email, social media and in-person. Have staff available to write comments for attendees who

are unable to write on their own. Also, have translators available for attendees who are LEP.

Goal 4: Report public involvement results.

Objectives

- Establish a system for recording and organizing feedback.
- Provide decision makers with public input results.
- Provide feedback to participants and the public about how the input has been incorporated.

Goal 5: Periodically review the public involvement process to ensure effectiveness and modify the plan as necessary.

An aggressive public participation process is conducted for all major changes including but not limited to the following:

- Fare Changes (excluding temporary or promotional fare changes).
- Major Service Changes: Any service changes when compared to the previous fiscal year that increases or decreases by twenty-five percent (25%) or more of the revenue route miles or revenue route hours on any individual route or combination of routes. Major Service Changes require community outreach for comments and a public hearing to be held prior to final action on possible changes.

The City of Tucson may hold public community meetings or solicit public feedback on other proposed changes that affect transit service but do not meet the above criteria.

Solicitation of Comments

The community is encouraged to comment on proposed transit fare increases and major service changes in the following ways:

- Attend a public community meeting to learn about the proposed changes and submit comments.
- Via mail or email, or fill out an online comment form
- Post comments on Social Media.
- Call customer service at (520) 792-9222

Other methods for providing comments may be utilized if deemed necessary to gain a more complete overview of the public's opinion on proposed changes. These may include on-board surveys, online surveys, or other methods identified as appropriate and beneficial.

Communication and Outreach Methods

Sun Tran staff utilizes several strategies to reach transit riders and the public-at-large in an ongoing effort to circulate transit-related information. These tools are utilized in addition to community events and public meetings to engage and solicit feedback when a major service change or fare increase is proposed. Notifications to the community will be visible no less than two (2) weeks prior to the first community meeting and/or public hearings, following the City of

Tucson Clerk's Office public notice requirements for Mayor and Council meetings, and may include the following:

- Transit websites – Details about the service and/or fare changes, community and/or public hearing meeting details, and a listing of ways to comment can be found at suntran.com, suntran.com/sunshuttle/index.htm, sunlinkstreetcar.com, and sunvan.com. All information online is available in Spanish for easy accessibility for LEP populations.
- Social Media - Sun Tran and Sun Link social media sites provide an avenue to engage the public and provide input should the public choose.
- Posters and information cards available on all revenue vehicles.
- Printed posters and information available on the digital signage at the three transit centers.
- Distribution of details to local print, television, and radio stations for continued media coverage and updates.
- Communications with SunGO sales outlets, Get On Board Program employers, community-based organizations, and special interest groups (e.g.: Transit Task Force, Friends of Streetcar, Bus Riders Union, Regional Transportation Authority, Pima Association of Governments, etc.)
- Communications with the City of Tucson Manager's Office, Department of Transportation, and Mayor and Council.
- Community Meetings – A minimum of two (2) and as many as eight (8) public meetings will be held, with potentially one (1) in each Ward, as well as the University of Arizona, and tribal lands, to educate the public and obtain public comments on proposed major service changes and fare increases. Every effort is made to hold community meetings at locations with transit service at various hours throughout the day and various days throughout the week. Commonly used locations include public libraries, Ward offices, and community centers to name a few.

  The format of the meeting may vary depending on the number of individuals in attendance and the magnitude of the proposed changes. In many cases, a PowerPoint presentation may be provided with English and Spanish speaking staff on-hand to answer questions. There will be information boards and handouts available for individual discussions with staff should additional questions need to be asked. All attendees are required to sign in and comment cards will be made available should the attendees wish to provide written comment.

All public meetings for major service changes and fare changes will meet the following criteria:

- English and Spanish-speaking staff will be always available to explain the proposed changes and allow the public to ask questions.
- All public comments will be captured for the record.
- Meeting materials will be available in Spanish and Braille, or audio recording formats will be available upon request at least one (1) week prior to the meeting.
- All meetings will be held in ADA-accessible locations within the service area.
- Public Hearings will follow any community meetings or other outreach prior to fare changes and/or major service changes. Public Hearing notices will follow the guidance from the City of Tucson Clerk's Office for Mayor and Council meetings.

Consideration of Public Comments

All comments, positive, neutral, and/or negative, concerning major service changes and fare changes received through the public participation process will be compiled and summarized by Sun Tran's Marketing Department staff and provided to the General Manager and Assistant General Manager along with a summary report for review prior to sending all materials to the Tucson Department of Transportation who then forwards the materials to the City of Tucson Mayor and Council. All public comments will be available as received (i.e., unedited).

Responsibilities

Responsibility for the public participation process for fare changes and major service changes are detailed below.

For service changes, the Scheduling & Service Development Department will:

- Develop plans and make recommendations concerning proposed service changes.
- Convene the public participation team (Marketing staff) to assist in the solicitation of public comments.
- Attend and participate in all public meetings regarding proposed service changes.
- Review all comments received and summary report developed by marketing staff.
- If necessary, revise the major service change proposals based on public comments and direction from the City of Tucson.
- Communicate results to the General Manager and Assistant General Manager for consideration and submission to the City of Tucson.

For fare increases, the General Manager will:

- Under the direction of the City of Tucson, work with the Finance Director to make plans and decisions concerning proposed fare changes, including developing fare change scenarios for TDOT staff to review.
- Ensure staff has developed accurate materials and all public meetings are covered.
- Review all fare change-related comments received during the public meeting process.
- Communicate the fare change summary report and all comments to City of Tucson staff for further communication to Mayor and Council.

The Sun Tran Marketing Department will:

- Make all public meeting venue arrangements.
- Maintain all documentation related to the public participation process.
- Use the communication and outreach methods outlined in this document to inform the public of the public meetings and to provide details about the proposed changes and ways to provide comments.
- Prepare fact sheets on the fare scenario(s) listing all current and proposed fares for posting online and distribution at the public meetings.
- Create all documents in English and Spanish, available to create information in accessible formats and provide interpreters if requested at least one (1) week in advance.
- Prepare and/or review the presentation if one will be provided at the public meetings.

- Prepare all materials for the public meeting, such as handouts, display boards, Ride Guides, brochures, etc.
- Attend all public meetings.
- Compile all public comments received via mail, email, and phone or in person, and summarize in a final report for approval by the General Manager and Assistant General Managers and distribution to the City of Tucson.

Summary of Recent Public Involvement and Participation

On behalf of the City of Tucson, Sun Tran staff hosted eight (8) public open house events (seven (7) in-person and one virtual) to obtain public input on the following subjects:

- City of Tucson Title VI Policies
  - Major Service Change
  - Fare Change
  - Disparate Impact
  - Disproportionate Burden
- Future of Fares
  - Offer community the opportunity to provide input on the future of fares.
  - Take a paper survey regarding the future of fares.

This report contains only the information obtained on the **Proposed Title VI Policies**. All of the comments included in this report came from all sources including comment cards at public meetings, email, U.S. mail, website and telephone.

A total of eight (8) public open house events (seven (7) in-person and one (1) virtual) were held throughout the community and in areas with low-income and minority populations. A total of fifty-four (54) people attended the meetings hosted in local libraries, ward offices, tribal facilities and virtually.

To promote the open house events, staff posted information in each transit vehicle, which includes Sun Tran, Sun Express, Sun Shuttle, Sun Van, and Sun Link. All information was posted at transit centers, on the regional transit websites, online, on social media, and distributed to local media outlets for additional outreach to the community at large.

Local media also ran multiple stories to promote the public input open house events:

Media Outlet	Number of Stories Ran
KOLD/KMSB	14
KVOA	15
KVOI-AM	1
KHRR	2
Tucson Sentinel	1
Total	**33**

Sun Tran posted several stories to their social media where it was shared by the community:

Sun Tran Social Media	Number of Post	Reach/ Shares
Facebook	8	20 shares (combined)
Instagram	20	2,376 reach (combined), 19 stories shared, 5 saved posts
Twitter	6	17 retweets (combined)

All communications were in English and Spanish to ensure the entire population had access to the information.
The open house events, which included the Title VI Policies, and the future of fares discussion, dates, times, locations, and attendance are listed below:

Public Meeting Schedule – 2022 Title VI Policies for Major Service and Fare Changes			
7/11/2022	12-1pm	Flowing Wells Library	7
7/12/2022	12-1pm	Ward 2 Office	1
7/13/2022	5-6pm	Miller-Golf Links Library	3
7/14/2022	5:30-6:30pm	Ward 1 Office	8
7/18/2022	1-2pm	Quincie Douglas Library	6
7/19/2022	1-2pm	Pascua Yaqui Health & Social Service Family Center	4
7/20/2022	12:30-1:30pm	Joel D. Valdez Main Library	20
7/21/2022	6-7pm	Virtual Meeting	5
		Total Number of Attendees	**54**

We spoke to a total of fifty-four (54) people, who attended either one of our eight (7) open houses or the virtual meeting. Spanish speaking staff attended each open house event to provide verbal, and written translation if necessary. The community made comments on all things transit; many different topics were brought up at the public input open houses, regarding the Title VI policies all comments were positive. A copy of the eleven (11) comments can be found in **Attachment A**. Additionally, eighteen (18) community members took the opportunity to submit a paper survey.

Public Engagement Process
Actions requiring formal public input process:

1. Changes in fares (except temporary or promotional changes).
2. Major Service Changes: Any service changes when compared to the previous fiscal year that increases or decreases by twenty-five (25%) or more of the revenue route miles or revenue route hours on any individual route or combination of routes. Major Service Changes require community outreach for comments and a public hearing to be held prior to final action on possible changes.

Public Comment Process
The community is encouraged to comment on proposed transit fare increases and major service changes in the following ways:

- Attend a public meeting to learn about the proposed changes and submit comments.
- Via mail or email or fill out an online comment form.
- Post comments on social media.
- Call Customer Service at (520) 792-9222.

Other mechanisms for commenting may be utilized, if deemed necessary, to gain a more complete overview of the public's opinion on the proposed changes. These may include onboard surveys, online surveys or other methods identified as appropriate.

Below are details regarding any public meetings:

- A minimum of two (2) and as many as eight (8) public meetings will be held, with potentially one (1) in each Ward, as well as the University of Arizona and tribal lands, to educate the public and obtain public comments on proposed major service changes and fare increases.
- Every effort will be made to host community meetings at locations impacted by the proposed changes and at a variety of times and days to accommodate the public. All locations will be accessible by transit services, including Sun Tran, Sun Shuttle and/or Sun Link.
- At least two (2) weeks advance notice will be provided to ensure all employees, passengers and the public is well informed. Multiple notifications and feedback techniques will be utilized, which are outlined within this document.

Public Notification Process

Notification of public community meetings and solicitation of comments, at a minimum, will include the following strategies at least one (1) week prior to the first meeting:

- Notices will be posted on the websites impacted by the proposed major service changes and/or fare changes, which include www.suntran.com, www.suntran.com/sunshuttle, www.sunlinkstreetcar.com, and www.sunvan.com.
- Notices posted on social media pages for Sun Tran and Sun Link.
- Media releases distributed to local media print, radio, and television media outlets.
- Posters and information cards available on all transit vehicles
- A public hearing will be held prior to final action by the governing body. Notices of any public hearing will be published fourteen (14) days prior to the hearing and will comply with the City of Tucson guidelines for notice of Mayor and Council meetings.

Other notification strategies may be utilized, such as: posters and information available on electronic monitors at transit centers, emails distributed through listservs, front-end phone messages, information distributed to local Get on Board Program employers, organizations in the pass distribution program, and sales outlets.

Public Community Meetings

- Staff will be available at all public community meetings to explain the proposed changes and allow the public to ask questions. A formal presentation may be provided or discussions with individuals may be best depending on the number in attendance.
- Written materials detailing the proposed changes will be available.
- Meetings will be held in accessible locations.
- All attendees will be asked to sign-in and comment cards will be provided for attendees to submit. Staff is also available to assist attendees who are unable to sign-in or write their own comments.
- Spanish-speaking Staff will be on hand to translate for Spanish-speaking attendees.

Consideration of Public Comments

Staff will prepare a written summary of all comments received and any suggested changes to the proposed major service changes and/or fare changes once the public comment deadline is passed. This summary will be provided to the Sun Tran General Manager and Assistant General

Managers for review and approval before forwarding to TDOT. TDOT staff will provide the summary to the City of Tucson Mayor and Council for their review the public hearing to decide whether they approve the changes.

Requirement to Provide Meaningful Access to LEP Persons

(CHAPTER III-6, Number 9)

Language Assistance Plan for providing language assistance to persons with limited English proficiency (LEP), based on the DOT LEP Guidance

City of Tucson – Language Assistance Plan

Introduction

Most individuals in the United States read, write, speak, and understand English. However, there are many individuals whose primary language is not English. Individuals who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English can be limited English proficient, or "LEP." This language barrier may prevent individuals from accessing services and benefits.

There are two pieces of legislation that provide the foundation for the development of an LEP plan: Title VI of the Civil Rights Act of 1964, and Executive Order 13166. In some circumstances, failure to ensure that LEP persons can effectively participate in federally assisted programs may constitute discrimination based on national origin under Title VI. In order to comply with Title VI, agencies should take reasonable actions for competent language assistance. Executive Order 13166 clarifies requirements for LEP persons under Title VI. The Executive Order requires the agency to examine the services it provides and to develop and implement a system by which LEP persons can meaningfully access those services.

This plan outlines five key areas of an effective LEP strategy: Identifying LEP individuals who need language assistance, primarily through Census data; Language assistance measures, including written and oral language services, and responding to LEP persons on the telephone, in writing and in person; Training staff, including coach operators, Customer Satisfaction representatives and management employees; Providing notice to LEP persons through both oral and written communications; and monitoring and updating the LEP plan through a variety of means.

Four Factor Analysis

The U. S. Department of Transportation (USDOT) issued its Policy Guidance Concerning Recipient's Responsibilities to Limited English Proficient (LEP) Persons [Federal Register: December 14, 2005 (Volume 70, Number 239)]. This policy states that DOT recipients are required to take reasonable steps to ensure meaningful access to programs by LEP persons. This coverage extends to the recipient's entire program. There are four factors for agencies to consider when assessing language needs and determining what steps they should take to ensure access for LEP persons: 1) The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity or service of the recipient; 2) The frequency with which LEP individuals come in contact with the program; 3) The nature and importance of the program,

activity or service provided by the recipient to people's lives; and 4) The resources available to the recipient and costs. A brief description of the self-assessment undertaken in each of these areas follows.

Factor 1: The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity or service.

Based on Languages Spoken At Home for the Population 5 Years and Over (Universe: Population 5 Years and Over) from table C16001 in the American Community Survey 5-year, 2016-2020 using Census Tracts. (Appendices A) Stats estimated by geospatial intersection. The study determined the major language groups in Pima County/Tucson, AZ Metro Area besides English are Spanish, Indo-European, Chinese (incl. Mandarin, Cantonese) and Arabic languages and other. The numbers of LEP persons in Tucson are shown in the table below, categorized by the language they speak at home. [U.S Census Bureau]

All lines — Population - Language spoken at home by English ability

STATS | TABLES

Topic: Population | Rows: Language sp... | Columns: English ability | Year: 2020 | Buffer: 0.75 mi

	Speak English very well	Speaks English less than very well	Total
English	67.1% (396,954)	0.0% (0)	67.1% (396,954)
Spanish	19.4% (114,754)	8.4% (49,556)	27.8% (164,309)
French, Haitian, or Cajun	0.2% (1,417)	0.1% (472)	0.3% (1,889)
German or other West Germanic languages	0.3% (1,596)	0.0% (174)	0.3% (1,771)
Russian, Polish, or other Slavic languages	0.2% (1,364)	0.1% (821)	0.4% (2,185)
Other Indo-European languages	0.5% (3,009)	0.1% (812)	0.6% (3,822)
Korean	0.1% (788)	0.1% (440)	0.2% (1,228)
Chinese (incl. Mandarin, Cantonese)	0.4% (2,163)	0.3% (2,028)	0.7% (4,192)
Vietnamese	0.2% (1,026)	0.2% (1,161)	0.4% (2,187)
Tagalog (incl. Filipino)	0.2% (1,285)	0.1% (495)	0.3% (1,780)
Other Asian and Pacific Island languages	0.3% (1,754)	0.1% (857)	0.4% (2,611)
Arabic	0.3% (1,698)	0.2% (1,219)	0.5% (2,916)
Other and unspecified languages	0.7% (3,867)	0.4% (2,103)	1.0% (5,970)
Total	89.8% (531,675)	10.2% (60,139)	100.0% (591,814)

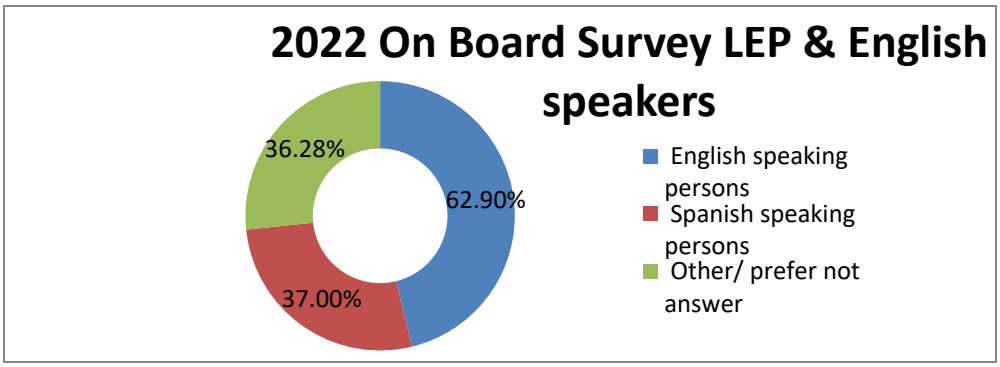
Language Spoken At Home For The Population 5 Years And Over (Universe: Population 5 Years and Over). From table C16001 in the American Community Survey 5-year; 2016-2020, using Census Tracts. Stats estimated by geospatial intersection.

As can be seen from the table, 134,721 are considered LEP and respond that they speak English less than "very well". Of those who consider themselves LEP, 114,754 are Spanish speakers. Of the Spanish-speaking LEP persons 19.4% said they spoke English very well and 8.4% said less than well. By contrast, 0.6% of the Tucson population are LEP persons that Indo European languages, and similarly 0.7% Chinese and 0.4% Pacific Island languages. Other languages spoken than those listed make up 5,970 people or 1.0%. Taken together, LEP persons that speak a language other than Spanish make up 5.1% of the population surveyed.

Results from 2022 On-Board Survey related to language

The chart below illustrates the percentage of Spanish-speaking LEP persons, LEP persons that speak other languages, and English speakers in Tucson. Clearly Spanish speakers are the primary LEP persons likely to be encountered by Sun Tran and Sun Van.

Languages spoken at home based on 2022 On-Board Survey:



Of the 7,699 surveys collected, 88.9% of all riders surveyed responded that they speak English at home. 79.4% of all the riders surveyed responded that they speak Spanish at home. 27.2% of riders surveyed speak another language other than English at home.

The most predominant languages spoken at home by riders, as reported in the 2022 On-Board Survey, are listed as follows; (Table 5-25A: Other Languages Spoke at Home).

Language respondent speaks at home other than English	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Spanish	79.4%	83.1%	76.7%	48.7%
Arabic, Standard	2.2%	1.4%	1.6%	8.7%
Other	1.7%	1.7%	21.0%	0.1%
French	1.4%	1.1%	0.0%	4.0%
Hindi	1.1%	0.1%	0.0%	10.2%
Russian	1.1%	1.0%	0.8%	2.0%
German	1.0%	1.0%	0.0%	1.5%
Japanese	1.0%	0.9%	0.0%	1.8%
American Sign Language (ASL)	0.9%	1.0%	0.0%	0.2%
Swahili	0.9%	1.0%	0.0%	0.0%
Korean	0.8%	0.8%	0.0%	1.5%
Old Persian	0.8%	0.8%	0.0%	1.1%
Italian	0.6%	0.3%	0.0%	3.0%
Vietnamese	0.6%	0.5%	0.0%	1.4%
Chinese, Mandarin	0.6%	0.3%	0.0%	3.4%
Somali	0.5%	0.5%	0.0%	0.9%
Chinese	0.5%	0.3%	0.0%	2.0%
Navajo	0.4%	0.5%	0.0%	0.0%
Hebrew	0.3%	0.3%	0.0%	0.8%
Filipino	0.3%	0.4%	0.0%	0.0%
Judeo-Malayalam	0.3%	0.4%	0.0%	0.0%
Chinese, Cantonese	0.2%	0.2%	0.0%	0.8%
Portuguese	0.2%	0.1%	0.0%	1.1%
Nepali	0.2%	0.0%	0.0%	2.0%
Portuguese creole of Tugo	0.2%	0.2%	0.0%	0.0%
Turkish	0.2%	0.1%	0.0%	0.8%
Afrikaans	0.2%	0.2%	0.0%	0.1%
Akan	0.2%	0.1%	0.0%	0.5%
Haitian Creole French	0.1%	0.1%	0.0%	0.0%
Noric	0.1%	0.1%	0.0%	0.0%
Dari	0.1%	0.1%	0.0%	0.0%
Finnish	0.1%	0.1%	0.0%	0.0%
Hungarian	0.1%	0.0%	0.0%	1.1%
Jamaican	0.1%	0.1%	0.0%	0.0%
Ojibwa	0.1%	0.1%	0.0%	0.0%
Louisiana Creole French	0.1%	0.1%	0.0%	0.0%
Kannada	0.1%	0.0%	0.0%	0.7%
Seselwa Creole French	0.1%	0.1%	0.0%	0.0%
Old English	0.1%	0.1%	0.0%	0.0%
Ukrainian	0.1%	0.0%	0.0%	0.6%
Thai	0.1%	0.0%	0.0%	0.6%
Farsi, Eastern	0.1%	0.1%	0.0%	0.0%
Dutch	0.1%	0.1%	0.0%	0.0%
Norwegian	0.0%	0.1%	0.0%	0.0%
Yakut	0.0%	0.1%	0.0%	0.0%
Classical Greek	0.0%	0.1%	0.0%	0.0%
Indonesian	0.0%	0.0%	0.0%	0.0%
Nahuatl	0.0%	0.0%	0.0%	0.0%
Bengali	0.0%	0.0%	0.0%	0.0%
Urdu	0.0%	0.0%	0.0%	0.0%
Kreyol	0.0%	0.0%	0.0%	0.0%
Amharic	0.0%	0.0%	0.0%	0.0%
Ndebele	0.0%	0.0%	0.0%	0.3%
Tagalog	0.0%	0.0%	0.0%	0.0%
Dutch Creole	0.0%	0.0%	0.0%	0.0%
Swedish	0.0%	0.0%	0.0%	0.0%
Telugu	0.0%	0.0%	0.0%	0.1%
Malay	0.0%	0.0%	0.0%	0.1%
Czech	0.0%	0.0%	0.0%	0.0%
Early Contemporary Swedish	0.0%	0.0%	0.0%	0.0%
Aragonese	0.0%	0.0%	0.0%	0.0%
Danish	0.0%	0.0%	0.0%	0.0%

Factor 2: The frequency with which LEP individuals come in contact with the program in Tucson.

Sun Tran, Sun Link and Sun Van assess the frequency at which staff has or could possibly have contact with LEP persons. This includes examining census ACS data, surveys including the On-Board survey, phone inquiries, requests for translated documents, and staff feedback. As discussed above, U.S Census Bureau ACS data indicate that there is a fairly moderate percentage (6.8%) of the general population of Tucson who are Spanish-speaking LEP persons. Furthermore, the 2010 – 2014 U.S. Census Bureau ACS data for Tucson indicates that 15% of those who take public transportation to work are LEP, further illustrating the importance of the service provided by Sun Tran, Sun Link and Sun Van to LEP persons. Phone inquiries and staff feedback also indicate that Spanish-speaking LEP persons have regular contact with the service. As a public transportation provider, it is necessary to recognize this substantial segment of the general population.

Factor 3: The nature and importance of the program, activity, or service provided by the program to people's lives.

Public transportation is vital to many people's lives. According to the USDOT's Policy Guidance Concerning Recipient's Responsibilities to Limited English Proficient (LEP) Persons, "Providing public transportation access to LEP persons is crucial. An LEP person's inability to utilize effectively public transportation may adversely affect his or her ability to obtain health care, or education, or access to employment."

Factor 4: The resources available to the recipient for LEP outreach, as well as the costs associated with that outreac*h.*

Sun Tran, Sun Link and Sun Van assessed their available resources that could be used to provide language assistance. This included identifying bilingual staff, utilizing an existing contract for professional translation services, determining which documents should be translated, and deciding what level of staff training is needed.

After analyzing, the four-factor outlined in USDOT policy guidelines, Sun Tran, Sun Van, and Sun Link developed the following plan for providing language assistance to LEP persons.

Components of the Plan

There are five areas that comprise Sun Tran, Sun Van, and Sun Link's Language Assistance Plan (LAP):

1. Identifying LEP individuals who need language assistance
2. Language assistance measures
3. Training staff
4. Providing notice to LEP persons
5. Monitoring and updating the LAP

1. Identifying LEP individuals who need language assistance

As stated above, U.S. Census Bureau, 2010-2014 American Community Survey 5 Year Estimate data show that Spanish-speaking LEP persons are the primary group requiring language assistance. This information can also be used to identify concentrations of LEP persons within the service area. Identifying concentrations of LEP persons helps to ensure that they receive the necessary language assistance measures.

The zip code areas with the highest concentrations of LEP persons in Tucson are 85705, 85706, 85713, 85714 and 85756. Higher percentages of LEP persons can also be located by census tracts. A map indicating census tracts with a higher concentration of LEP persons than the Pima County average can be found in (Appendix B). In general, there are higher populations of LEP persons on the south and west sides of the city of Tucson, with the highest concentrations near I-10, I-19, Drexel Road and Aviation Highway. Within these regions, there are large areas where over 25% of the population is LEP. Most of the Sun Tran buses pass through one or more of these areas on their scheduled routes many times per day. As a result, many LEP persons ride throughout the city and utilize Ronstadt, Laos and Tohono Transit Centers to get to their destinations.

There are also several measures that can be taken to identify individual persons who may need language assistance:

- When open houses or public meetings are held, set up a sign-in table, and have a staff member greet and briefly speak to each attendee, in order to informally gauge his/her ability to speak and understand English.
- Have the Translation Assistance cards available at various events. While staff may not be able to provide translation assistance at the time, the cards are an excellent tool to identify language needs for future events/meetings and how to contact Customer Satisfaction to receive translation services via phone.
- Post a notice of available language assistance at open houses/public meetings to encourage LEP persons to self-identify.

2. Language assistance measures

There are several language assistance measures available to LEP persons, including both oral and written language services. There are also various ways in which Sun Tran, Sun Link and Sun Van staff respond to LEP persons, whether in person, by telephone or in writing.

Spanish speaking callers are directed to a bilingual Customer Satisfaction Representative. They ensure that compliments/requests/complaints from LEP persons that could be considered national origin discrimination are forwarded to the Title VI Coordinator Davita Mueller.

Oral

Bilingual Customer Satisfaction Representatives and Marketing Department staffs are available upon call in to the Sun Tran Customer Satisfaction Center at (520)792-9222 and are available during every shift. Bilingual Customer Satisfaction Representatives are also located at the Laos Transit Center and Ronstadt Transit Center Monday-Friday 8:00 a.m. to 5:00 p.m. PST. Sun Tran offers Telecommunications Device for the Deaf (TDD) number for LEP persons who need to reach the Customer Satisfaction Department by calling (520) 628-1565.

Bilingual staff including Marketing is available for a variety of presentations and events, and as a rule, Spanish-speaking staff should be on hand at public meetings or open houses intended for gathering public input. There are many bilingual transit vehicle operators as well. Spanish-language advertising is also used to promote new and improved bus services. There are (3) three language assistance bus posters located on the Sun Tran fleet with information on languages offered and to call Customer Satisfaction at Sun Tran (520)792-9222 x03) to access the Translation Assistance service number. When requested, an American Sign Language (ASL) Interpreter can be made available for online or in person events.

For riders calling Sun Van, Reservations can be reached at (520) 791-1000 x 11. Those calling this number will need to state their language of choice in English and will be transferred to the contracted vendor United Language Group for a translator in that language. When callers are Spanish speaking callers are directed to a bilingual Reservationist. Any written correspondence in Spanish is translated by an Operations supervisor or the System Administrator and given to the appropriate manager/supervisor; their response is then translated into Spanish.

Sun Tran Bus Operators, Sun Van Operators, Sun Link Operators (when not in the Operators Cab) as well as American Guard Services are the most direct point of contact for LEP persons and have several methods to respond to an LEP individual. However, if the Operator or Guard are not bilingual, they are instructed to ask for assistance from a bilingual passenger. In the few cases where there is no one on the transit vehicle who can offer language assistance, the staff contacts dispatch, and a bilingual supervisor will communicate by radio, phone or in person to assist. Staff can direct LEP persons to the any one of the three posters (see Appendices C, D & E) on the Sun Tran buses so they can call Customer Satisfaction, or they can hand them a Language Assistance business card (see Appendices F).

Written

In addition to these oral language services, there are three primary ways that Sun Tran, Sun Link and Sun Van provides written translation. Bilingual Customer Satisfaction Representatives respond to correspondence in Spanish. Bilingual Marketing Department staff members translate brochures, flyers, and posters into Spanish. Translation of more complex and lengthy information is contracted out to a professional translator and utilizing a current contract for a translation service with the selected vendor.

Several written language services are available. Documents that are determined to be vital are

translated into Spanish. When requested, documents such as the Ride Guide can be printed in Braille utilizing a current contract for a Brielle service. Any of the transit materials can be printed in large print format via request to Customer Satisfaction. Vital documents are defined as those documents without which a person would be unable to access services.

The following are some examples of the written communications that are printed in both Spanish and English for Sun Tran, Sun Van and Sun Link:

- Transit Schedule booklets and brochures including but not limited to The Ride Guide
- Temporary signs at bus stops and transit centers, streetcar platforms for detours or route changes
- Strip cards containing information about route changes, detours, rider alerts or upcoming Public Input meetings
- ADA Paratransit Eligibility application
- Streetcar Destinations and How to Ride Sun Link Streetcar
- Interior bus posters and stickers displaying safety or system information
- Accessible Bus Service, Ready Set Ride, and Your Route to Independence brochures
- All rider survey's including the Onboard survey
- Streetcar Destinations Guide & How to Ride
- How to Ride Sun Van
- Discrimination Complaint Form (see Appendices G & H)
- Language Assistance posters

The following are some examples of the written communications that can be printed in Braille or large print format:

- The Ride Guide can be printed into Braille (there is a 20-business day wait for the material)
- Large print format: Any transit printed material
-

Technology

When public instructional videos are created that cover topics considered vital, Sun Tran, Sun Link and Sun Van will produce them in English and Spanish, these instructional videos can be found at suntran.com or on the Sun Tran YouTube Social media channel at SunTranTucson.
Sun Tran, Sun Link and Sun Van websites have been consolidated into one transit website located at Suntran.com and is available in multiple languages translated by Google. The TRANSLATE button is located at the top right of the page to select the language you desire.

Sun Tran, Sun Link and Sun Van Transit Employee Training

There are four primary groups of staff members who are critical to the LEP plan: Vehicle operators, Security staff Customer Satisfaction Representatives, department directors and Marketing staff. Coach operators have the most frequent contact with LEP persons, through daily interaction with passengers. Customer Satisfaction Representatives also have frequent contact with LEP persons, either in-person or by telephone. These two groups are most likely to encounter LEP persons and thus provide language assistance. LEP training for both of these groups occurs during their initial departmental training.

It is important that staff members, especially those having contact with the public, know their obligation to provide meaningful access to information and services for LEP persons. Even staff

members who do not interact regularly with LEP persons should be aware of and understand the LEP plan. Properly training staff is a key element in the effective implementation of the LEP plan.

Instructional videos in English & Spanish for employees are located (but limited to) the password protected Driver Connection page on the website, classroom training, safety meetings and monitors located in the Driver lounges at each site as well as the Operators Information Guide.
Training topics for these groups include:

- Understanding the Title VI LEP responsibilities
- What language assistance services Sun Tran, Sun Link and Sun Van offer
- Specific procedures to be followed when encountering an LEP person

Department directors, including the General Manager and Assistant General Managers, are also crucial in implementing LEP policy. Copies of the LEP plan are distributed to all department directors, the General Manager, and the Assistant General Managers, and it is their responsibility to disseminate LEP plan information to appropriate administrative staff. Department directors should ensure their staff understand Title VI responsibilities.

The Marketing department staff are another key element in the implementation of the LEP plan. They produce nearly all written forms of communication to the customer base and community and are instrumental in ensuring that the LEP plan is followed. Copies of the LEP plan are distributed to all Marketing staff to ensure that written communications adhere to the LEP plan guidelines.

Providing notice to LEP persons

There are several ways that Sun Tran and Sun Van provide notice to LEP persons that language assistance measures are available, through both oral and written communications:

- Both the Sun Tran Customer Satisfaction Center and the Sun Van Reservation line use an automated greeting in both Spanish and English, directing callers to select which language they prefer
- The Ride Guide cover provides the title and dates in both Spanish and English, indicating that the publication is accessible to Spanish speakers
- Other documents, including public meeting notices and open house announcements should include a tagline affirming that Sun Tran, Sun Link or Sun Van will make reasonable accommodations to translate any materials into Spanish, or to provide an interpreter
- A statement on suntran.com website indicating that language assistance is available

Monitoring and updating the LEP plan

This plan is designed to be flexible and should be viewed as a work in progress. As such, it is important to consider whether new documents and services need to be made accessible for LEP persons, and also to monitor changes in demographics and types of services, and to update the LEP plan when appropriate. At a minimum, Sun Tran, Sun Link and Sun Van will follow the Title VI Program update schedule for the LEP plan.
Each update should take the following into account:

- How many LEP persons were encountered?
- Is the existing language assistance meeting the needs of LEP persons?
- What is the current LEP population in Tucson?
- Has there been a change in the types of languages where services are needed?

- Have available resources, such as technology, staff and finances changed?
- Were any complaints received?
- Do staff members understand the LEP plan policies and procedures?

There are several methods that can be used to assist in answering these questions. One method is to review customer comments and complaints to determine if services are accessible to Spanish speakers. Feedback from the LEP community will be sought through community outreach events and presentations to determine the effectiveness of the plan in reaching LEP persons. Special consideration will be given to the LEP plan when service enhancements funded through the Regional Transportation Authority (RTA) are implemented, to ensure that LEP persons are aware of these services. Census data will also be reviewed as it becomes available to determine changes in the LEP population.

Future considerations for the LEP plan include:

- Providing all or part of the Sun Tran app in Spanish
- Translating other brochures (Bike and Ride) into Spanish
- Updated Accessibility brochure
- Updated Translation Assistance business cards
- Providing group travel training to LEP persons by working with bilingual staff

Dissemination of the Limited English Proficiency Plan

The LEP Plan is located at suntran.com click on About then click on Reports. Copies of the plan can be provided to any person or agency or LEP persons upon request at info@suntran.com.
Any questions or comments regarding the Limited English Proficiency Plan can be directed to either of the following:

Luz Navarrete
Sun Tran, Sun Link and Sun Van
Community Outreach Manager
3920 N. Sun Tran Blvd.
Tucson, AZ 85705
luz.navarrete@tucsonaz.gov
Phone: 520.206.8881
Fax: 520.791.2285

Cindy Glysson
Sun Tran, Sun Link and Sun Van
Marketing & Communications Director
3920 N. Sun Tran Blvd.
Tucson, AZ 85705
cindy.glysson@tucsonaz.gov
Phone: 520.206.8858
Fax: 520.791.2285

Minority Representation on Planning and Advisory Bodies

(CHAPTER III-9, Number 10)

- A table depicting the membership of non-elected committees and councils, the membership of which is selected by the recipient, broken down by race, and a description of the process the agency uses to encourage the participation of minorities on such committees

As part of its Title VI Program submission to the FTA, the City of Tucson must provide a table depicting the racial breakdown of the membership of any transit-related, non-elected planning boards, advisory councils, or committees for which the City of Tucson selects the membership. The City of Tucson has one (1) transit-related, non-elected citizen task force for which it selects the full membership: the Transit Task Force (TTF). The table on the following page depicts the current composition all boards, committees, commissions, and task forces.

In accordance with Resolution 15881 adopted by the City of Tucson's Mayor and Council, it is the policy of the City of Tucson that all appointments to City Boards, Committees, Commissions, Task Forces, and other such appointed bodies, be gender-balanced and reflect the ethnic and racial compositions of the City. Therefore, all interested individuals are encouraged to apply. To obtain this information, the City Clerk's Office requests that each member complete a race/ethnicity category card.

The recruitment for City Boards, Committees, Commissions, Task Forces, and other such appointed bodies, including the TTF, includes:

- Vacancy listing, task force description, functions, and application are made available online through the City Clerk's Office.
- Placement of recruitment information is on the City's "NewsNet," which is distributed internally to all City employees and externally to members of the public and the media.
- General information is provided to service agencies, organizations, and neighborhood associations. Individuals, seniors, people with disabilities, and individuals of all races are encouraged to apply.
- Contacts are utilized from current committee members, as well as the City's Commission on Disability Issues and Human Relations Commission, to identify individuals interested in serving.
- Mayor and Council are provided a gender and racial/ethnicity report to assist and encourage appointments within these categories.
- Accommodations are made for members who are disabled or need interpreter services.

City of Tucson
Boards, Committees, and Commissions
Gender and Racial/Ethnicity
Monthly Report

The Mayor and Council of the City of Tucson has directed the City Clerk to record the gender, racial and ethnic categories of those serving on all Boards, Committees, Commissions, task forces and other appointive bodies established by the Mayor and Council. Their goal is to have that membership (taken as a whole) be gender balanced and numerically reflect the ethnic and racial compositions of the City as determined by the current U.S. Census.

Date: July 2022

Total Members	449	**Total Boards**	53

	Composition of Tucson as determined by the 2000 U.S. census	Composition of Boards, Committees, and Commissions	
Ethnic and Racial Data:		**This Month**	**Last Month**
American Indian/Alaskan Native	2%	0%	0%
Asian/Pacific Islander	3%	1%	1%
Black	4%	3%	3%
Hispanic	36%	14%	14%
White	54%	49%	50%
Other	1%	4%	4%
Unknown		29%	29%
Gender Data:			
Female	51%	48%	48%
Male	49%	49%	50%
Unknown		3%	2%

Due to rounding, numbers may not add up to 100%
Prepared by the City Clerk

*Report includes all boards, commissions, committees, and task forces members

Providing Assistance to Subrecipients

(CHAPTER III-10, Number 11)

Pima Association of Governments (PAG), as a Metropolitan Planning Organization (MPO), as a direct recipient of Federal funding completes its own Title VI program, which is available upon request and/or via the PAG website at http://www.pagregion.com/documents/Transportation/PAGTitleVI2018Plan.pdf.

The Town of Oro Valley receives federal funding via a pass-through agreement with the City of Tucson. Their Title VI Program is available upon request and/or via their website at: https://www.orovalleyaz.gov/sites/default/files/media/docs/2019/title-vi-plan.pdf.

Monitoring Subrecipients

(CHAPTER III-10, Number 12)

- Primary recipients shall include a description of how the agency monitors its subrecipients for compliance with Title VI, and a schedule of subrecipient Title VI Program submissions

Pima Association of Governments/Regional Transportation Authority of Pima County (PAG/RTA) and the Town of Oro Valley are subrecipients of the City of Tucson pursuant to FTA's 5307 – Urbanized Area Formula Program. Additionally, these two organizations are also subrecipients of the Arizona Department of Transportation (ADOT) pursuant to FTA's 5310 – Enhanced Mobility of Seniors and Individuals with Disabilities Program.

A copy of the PAG/RTA and the Town of Oro Valley's Title VI Program for ADOT, as subrecipients of the State, are available online by following the links below. The City of Tucson and ADOT have reviewed both Title VI Plans.

PAG/RTA:
https://rtamobility.com/title-vi/

Town of Oro Valley:
https://www.orovalleyaz.gov/files/assets/public/documents/public-works/transit-services/policies-and-ada/title-vi-plan-5310-5307.pdf

The City of Tucson engages Intergovernmental Agreements (IGAs) with PAG/RTA and the Town of Oro Valley to solidify the compliance requirements of all aspects of FTA regulations. The IGAs, which are used to pass-through FTA funds to subrecipients, mandate that the subrecipients comply with the FTA's Master Agreement. By entering into the IGA, the subrecipients provide assurances to comply with all Title VI requirements. The IGAs also establish specific obligations for the establishment of a Language Assistance Plan for individuals with limited English proficiency (LEP) and compliance with FTA Circular 4702.1B.

The City of Tucson assists subrecipients in complying with the general reporting requirements stipulated in FTA Circular 4702.1B, by providing:

- Copies of the City of Tucson's notice to beneficiaries, fare change policy, major service change policy, disparate impact, and disproportionate burden thresholds, complaint procedures, complaint forms, public participation plan, and language assistance plan.
- Demographic information on the race and English proficiency of the residents of the subrecipient's service area; and,
- Any other relevant data that may assist the subrecipient in complying with Title VI requirements.

To ensure that the City of Tucson's subrecipients are in compliance with Title VI requirements, the City of Tucson will undertake any or all of the following monitoring activities, based on circumstances and as required:

- Conduct an initial meeting with the subrecipient to review requirements stipulated in FTA Circular 4702.1B.
- Provide an overview of the City of Tucson's Title VI Program documents, including required notices, procedures, and any additional information that may be relevant to the subrecipient.
- Review the subrecipient's required documents, notices, and other information for compliance with FTA Circular 4702.1B.
- Work with subrecipient's staff to draft and execute IGA.
- Conduct regular meetings, check-ins by email or phone, and site visits, as necessary, and as required to ensure continued compliance with FTA Circular 4702.1B and the IGA.
- Establish a timeframe for collecting and reviewing the subrecipient's Title VI Program and maintain a copy in electronic storage.
- As needed, perform an on-site compliance review. The results of a compliance review will be documented in writing and will include specific findings regarding compliance and recommendations for corrective actions if deficiencies are found. If it is determined that the matter cannot be resolved voluntarily, by informal means, action will be taken to effectuate compliance.
- Forward subrecipient Title VI information to the FTA, if requested: and
- In response to a complaint of discrimination, or as otherwise deemed necessary by the City of Tucson, request that the subrecipient verify that their level and quality of service is provided on an equitable basis.

Determination of Site or Location of Facilities

(CHAPTER III-11, Number 13)

A Title VI equity analysis if the recipient has constructed a facility, such as a vehicle storage facility, maintenance facility, operation center, etc.

The City of Tucson Department of Transportation currently has no plans to construct any new facilities, including vehicle storage facility, maintenance facility, operation center, etc.

Requirement to Provide Additional Information upon Request

(CHAPTER III-12, Number 14)

The City of Tucson, via Sun Tran, Sun Van, and Sun Link, will meet this requirement.

Requirement to Set System-Wide Service Standard and Policies

(CHAPTER IV-4, Number 4)

Overall Fixed Route Design

FTA requires all fixed route transit providers of public transportation to develop system wide service policies to ensure service design and operations practices do not result in discrimination based on race, color, or national origin in addition to quantitative standards for the following indicators.

a) Service Standards

□ Service standards

Individual public transportation providers will set the quantitative service standards; therefore, these standards will apply to each individual agency rather than across the entire transit industry. Additionally, where the service standards for Sun Tran (Fixed Route Bus) and Sun Link (streetcar) differ, both will be included. The standards required under the FTA Circular 4702.1B are listed below.

- Vehicle load for each mode: Generally expressed as the ratio of passengers to the number of seats on a vehicle, relative to the vehicle's maximum load point; for example, on a 40-seat bus, a vehicle load of 1.3 means all seats are filled and there are approximately 12 standees. Transit providers that operate multiple modes of transit must describe the specific vehicle loads for peak and off-peak times for each mode of fixed route transit service.
- Vehicle headways for each mode: The amount of time between two (2) vehicles traveling in the same direction on a given line or combination of lines
- On-time performance for each mode: A measure of runs completed as scheduled.
- Service availability for each mode: A general measure of the distribution of routes within an agency's service area

Vehicle load for each mode

1. Sun Tran defines maximum bus capacity as all available seats plus an average of seventeen (16) standing passengers. With a fleet average of 33 seats per vehicle, the vehicle load for Sun Tran is 1.50.

   The table below illustrates the average standing passengers per bus type.

Total in Fleet	Vehicle Type		Average Passenger Capacities			
			Seated	Standing	Total	Maximum Load Factor
11	2600 Series	Gillig Low Floor Biodiesel	34	17	51	1.5
4	2800 Series	Gillig Low Floor Biodiesel	32	16	48	1.5
49	3100 Series	Gillig Low Floor Bio-UREA	34	17	51	1.5
45	3200 Series	Gillig Low Floor CNG	34	17	51	1.5
23	3300 Series	Gillig Low Floor CNG	31	16	48	1.5
20	3400 Series	Gillig Low Floor CNG	31	16	48	1.5
18	3500 Series	Gillig Low Floor CNG	34	17	51	1.5
10	4000 Series	Gillig Low Floor Hybrid	34	17	51	1.5
5	4000 Series	Gillig Low Floor Electric	34	17	51	1.5
		Average:	33	16	49	1.5

2. Sun Link defines streetcar capacity as all available seats plus a maximum of one hundred twenty (120) standing passengers. With a fleet average of 28 seats per vehicle, the vehicle maximum load factor for Sun Link is 5.28.

   The table below illustrates the average standing passengers per fleet.

Total in Fleet	Car Numbers	Vehicle Type	Average Passenger CAPACITIES			
			Seated	Standing	Total	Maximum Load Factor
8	101 – 108	United Streetcar- 70% Low Floor Streetcar- USC Series 200	28	120	148	5.28

Vehicle headway each mode

1. Sun Tran policy calls for weekday peak and midday frequencies to be no more than thirty (30) minutes, including route segments (legs), and weekend frequency no greater than sixty (60) minutes. Evening/night frequency is no more than sixty (60) minutes.

   Policy headways and periods of operation:

Route Abbr.	Weekday Frequency				Saturday Frequency	Sunday Frequency
	Peak am (6:00 - 9:00)	Off-Peak	Peak pm (2:00 - 6:00)	Evening / Night		
Regular Routes						
1	30	30	30	60	60	60
2	30	30	30	60	60	60
3	30	30	30	30-60	60	60
4	15(30)	15(30)	15(30)	15-30(30-60)	30(60)	30(60)
5	30	30	30	60	60	60
6	20	20	20	30-60	30	60
7	20	20	20	30-60	60	60
8	15(30)	15(30)	15(30)	30	15(30)	20-30(40)
9	20	20	20	30-60	60	60
10	30	30	30	60	60	60
11	15(30)	15(30)	15(30)	60	60	60
12	20	20	20	30	30	30
15	30	30	30	60	60	60
16	15(30)	15 (30)	15 (30)	30(60)	15-30(60)	20-30(60)
17	30	30	30	60	60	60
18	15	15	15	15-30	15-30	20
19	30	30	30	60	30-60	60
21	30	30	30	60	30-60	30-60
22	30	30	30	30-60	60	60
23	30	30	30	30-60	60	60
24	30	30	30	30-60	60	60
25	30	30	30	30-60	30(60)	60
26	30	30	30	30-60	60	60
27	30	30	30	30-60	60	60
29	30	30	24-30	24-60	60	60
34	20	20	20	60	60	60
37	30	30	30	30	60	60
50	30	30	30	60	60	60
61	30	30	30	30	60	60

Express Routes					
Route Abbr.	Weekday Frequency			Saturday Frequency	Sunday Frequency
	Peak am	Off Peak	Peak pm	N/A	N/A
101X	2 am trips		2 pm trips		
102X	1 am trips		1 pm trips		
103X	1 am trips		1 pm trips		
104X	1 am trips		1 pm trips		
105X	1 am trips		1 pm trips		
107X	2 am trips		2 pm trips		
108X	1 am trips		1 pm trips		
109X	1 am trips		1 pm trips		
110X	2 am trips		2 pm trips		
201X	2 am trips		2 pm trips		
203X	2 am trips		2 pm trips		
204X	3 am trips		3 pm trips		

2. Sun Link policy calls for the following:
   a. Weekday:
      i. Peak frequency to be an average of 10 min
      ii. Off peak frequency to be 15 min
   b. Saturday:
      i. Peak frequency to be an average of 15 min
      ii. Off peak frequency to be 30 min
   c. Sunday:
      i. Peak frequency to be an average of 20 min
      ii. Off peak frequency to be 30 min

Sun Link Policy headways and periods of operation:

Weekdays/ *Entre Semana*		
	Monday–Wednesday *Lunes–Miércoles*	**Thursday–Friday** *Jueves–Viernes*
7 AM – 9 AM	Every 15 Minutes/*Cada 15 Minutos*	
9 AM – 6 PM	Every 10 Minutes/*Cada 10 Minutos*	
6 PM – 10 PM	Every 15 Minutes/*Cada 15 Minutos*	
6 PM – 12 AM	No Service/*Sin Servicio*	15 Min.
12 AM – 2 AM*	No Service/*Sin Servicio*	30 Min.

Weekends/ *Fin de Semana*		
	Saturday/*Sabado*	**Sunday**/*Domingo*
8 AM – 10 AM	Every 30 Minutes/*Cada 30 Minutos*	
10 AM – 6 PM	15 Min.	20 Min.
6 PM – 8 PM	15 Min.	30 Min.
8 PM – 12 AM	15 Min.	No Service/*Sin Servicio*
12 AM – 2 AM*	30 Min.	No Service/*Sin Servicio*

On time performance for each mode

1. Sun Tran revenue service vehicles may arrive up to 5 minutes earlier than the scheduled time point or arrive less than five minutes later than the scheduled time point and be considered on-time. If a Sun Tran revenue service vehicle arrives before the associated time point, as included in the Sun Tran route schedule, it shall not leave before the associated time point and still be considered on-time. The City of Tucson and Sun Tran's on-time performance objective (FY 2022 goal) is 92 percent (92%) or greater. Buses operating early should not exceed one percent (1%) nor should late buses exceed seven percent (7%). The City of Tucson continuously monitors on time performance and system results covering all aspects of operations. During Fiscal Year 2022 YTD on-time performance was 92%, including construction delays.

2. Sun Link vehicles uses a headway-based service delivery. Headways (the spacing between vehicles) are monitored, and on-time performance is calculated based on trips completed and if regularly scheduled streetcars arrive at their last station stop less than six minutes behind schedule. During Fiscal Year 2022 YTD on-time performance was 96%

Service availability for each mode

Bus Stops: City of Tucson, Department of Transportation Policy number 7.71, effective August 15, 2005 (revised 1/21/2010); Section 2.1, "*The criteria for the placement of fixed route bus (Sun Tran) stops is contained in the Transportation Access Management Guidelinesfor the City of Tucson, Arizona, Section 5.13: Transit Facilities* [1]". In order to provide convenient access to public transit, bus stops should be placed every one-quarter (¼) mile on major roadway projects located along existing local transit routes, and every one-half (½) mileto one mile along express or limited routes. Express routes typically need stops only within the first mile of the route origin (e.g., park-and-ride) and the last mile of the final destination (e.g., downtown or University of Arizona area). Additional stops may be considered to serve major trip generators such as college campuses, high schools, shopping centers, and hospitals. Unless otherwise warranted by overriding safety concerns or passenger convenience issues, bus stops should be located on the far side of the intersection. During project prioritization processes, reviews of the Title VI maps for minority and low-income populations are reviewed regularly to ensure equity in the distribution of transit amenities.

Streetcar Stops: City of Tucson, Department of Transportation determines the location of all streetcar stops as part of the design process of any new rail segments. Each stop location is based on factors related to safety of access and adjacent land-uses.

[1] http://cms3.tucsonaz.gov/files/transportation/access_management_guidelines_update_december_2011_final.pdf , Section 5.16, page 40, in update to Ordinance 9823, adopted March 17, 2003, revised December 2011

b) Service Policy

- Service policies

Transit Amenities Policy

City of Tucson, Department of Transportation Policy number 7.71, effective August 15, 2005 (revised 1/21/2010); Section 2.2, "Bus shelters may be installed at stops where requested. The City uses a few different types and sizes of shelters, some of which are installed by a private advertising contractor."

In order to provide convenient access to public transit, bus stops should be placed every one-quarter mile (¼) on major roadway projects located along existing local transit routes, and every one-half (½) mile to one mile along express or limited routes. Additional stops may be considered to serve major trip generators. Unless otherwise warranted by overriding safety concerns or passenger convenience issues, bus stops should be located on the far side of the intersection.

Bus shelters should be provided when available at all bus stops located along major roadways to provide for passenger comfort and safety.

Major roadway or large-scale development projects should include bus pullouts at high activity bus stops when warranted by peak-hour traffic, peak-hour bus frequency, passenger safety concerns, and when adequate right-of-way is available. Bus pullouts should be located on the far side of the intersection in order to utilize signal protection for re-entry into the stream of traffic. Bus pullouts should be carefully planned and designed to minimize transit vehicle delay in re-entering the stream of traffic. Bus pullouts should include shelters and other passenger amenities to provide for customer safety and convenience and should be designed to not conflict with driveway access.

During project prioritization processes for transit shelters or other amenities, the Title VI maps for minority and low-income populations are reviewed regularly to ensure equity in the distribution of transit amenities.

Streetcar Stops: City of Tucson, Department of Transportation determines the amenities based on location of streetcar stops during the design process of any new rail segments.

DEPARTMENT OF TRANSPORTATION
POLICY / PROCEDURE BULLETIN

SUBJECT: Bus Stop Placement	NUMBER	PAGE
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	EFFECTIVE DATE: August 15, 2005	

☐	All Divisions	3	Traffic Engineering	Transportation Director Approval:	Review/Revised Date: 1/21/10
☐	Director's Office	☐	Parkwise		
☐	Management Services	3	Transit		APWA Management Practice: 30.30
☐	Engineering	☐	Street and Traffic Signal Maintenance	Approved Date:	

1.0 Purpose

The purpose of this procedure is to establish guidelines for designating the location of fixed route bus system (Sun Tran) bus stops. Bus stops are to be placed in accordance with nationally accepted best practices and local policies that seek to optimize both transit service, pedestrian access, and the flow of traffic. Relevant guidance utilized in this procedure is provided by a number of national organizations and publications including: the Federal Transit Administration (FTA), the Federal Highway Administration (FHWA), the Institute of Transportation Engineers (ITE), the Manual on Uniform Traffic Control Devices (MUTCD) and the American Association of State Highway and Transportation Officials (AASHTO).

2.0 Procedures for Designating Bus Stops

2.1 The criterion for the placement of fixed route bus (Sun Tran) stops is contained in the Transportation Access Management Guidelines for the City of Tucson, Arizona, Section 5.13 Transit Facilities. Bus stops will be placed per the following guidelines:

- Ensure that stops and any improvements (benches, shelters, trash receptacles) are placed on public rights of way and not on private property.
- At ¼ mile, intervals along all local fixed routes or less frequent where adjacent land uses are vacant or sparsely populated. Additional stops may be considered to serve major trip generators such as college campuses, high schools, shopping centers, and hospitals. Express routes typically need stops only within the first mile of the route origin (e.g. park-and-ride) and the last mile of the final destination (e.g. downtown or UofA).
- On the farside of major intersections: minimum 100 feet beyond the marked crosswalk for 1 bus storage and up to 200 feet beyond the marked crosswalk for 2-bus storage.
- On the farside of all marked crosswalks, signalized or non-signalized: minimum 60 feet beyond the marked crosswalk. A bus stop may not be placed closer than 100 feet on the nearside of a marked crosswalk, unless approved by Traffic Engineering.
- A concrete or asphalt level left area shall be provided at all new stops per ADA standards: minimum 5 feet wide parallel to curb and 8 feet deep from back of curb. The City prefers a level lift area that is a minimum 10 feet wide by 10 feet deep where right-of-way is available. The lift area shall be connected to adjacent sidewalks per ADA standards. Refer to the U.S. Access Board's ADA Accessibility Guidelines for Buildings and Facilities, Section 10 (Transportation Facilities).

DEPARTMENT OF TRANSPORTATION
POLICY BULLETIN

SUBJECT: Bus Stop Placement	NUMBER 7.71	PAGE 1 of 3
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- Avoid placement of stops in front of storm drains and other obstacles that are hazardous to pedestrian access onto the bus.
- Avoid locations where the standing bus will block driveway access to and from major activity centers or high-volume businesses.
- TDOT Traffic Engineering has specifications for bus stop sign and pole installations. Blustaking is required prior to any pole and sign installation.

2.2 Bus shelters may be installed at stops where requested. The City uses a few different types and sizes of shelters, some of which are installed by a private advertising contractor. While there is great variation in shelter types and bus stop locations, the following guidelines should be followed:

- Shelter placement should avoid blocking visibility of driveway ingress and egress as well as pedestrian movements in the public sidewalk area. Sight Visibility Triangles (SVT) for each proposed shelter location is reviewed by TDOT Engineering before installation is granted.
- Shelter placement should avoid blocking visibility of adjacent business or directional signage on public and private property.
- Concrete shelter pads shall meet TDOT Engineering and TDOT Transit specifications. Contact TDOT Transit for current specifications for each shelter type.

2.3 Traffic flow at bus stop locations is to be optimized (when budgetary resources allow) by the appropriate use of dedicated or mixed use transit lanes and bus pullouts Typically, these facilities are provided on high-ridership transit routes along major urban arterial roadways. Contact TDOT Engineering for current bus lane and pullout placement and design specifications.

2.4 The TDOT Transit Division provides oversight of bus stop and bus shelter improvements and acts as liaison with Sun Tran, TDOT, other city departments, and external organizations. The Engineering and Traffic Engineering Divisions provide assistance with shelter design standards and installation, sight line issues, pedestrian safety, and traffic impact analysis as needed.

2.4 All stops outside of the City of Tucson limits require an intergovernmental agreement with the other jurisdictions. Traffic Engineering will locate these stops with concurrence from the other jurisdictional official. Each jurisdiction is responsible for their own bus stop improvements, ADA accessibility requirements, and passenger amenities, unless provided in the intergovernmental agreement with the City or by agreement with a private contractor.

DEPARTMENT OF TRANSPORTATION
POLICY BULLETIN

SUBJECT: Bus Stop Placement	NUMBER 7.71	PAGE 1 of 3
	EFFECTIVE DATE: August 15, 2005	

3.0 Distribution

Copies of this Department of Transportation Procedure Bulletin will be provided to Transit Division and Traffic Engineering Division employees directly involved in the operation and support of the fixed route bus service and will be available for review at Transit Division Offices.

4.0 Cross References

Tucson City Code Chapter 30, Section 30-2.
Administrative Directive 1.01-1 (Revision Pending)
City of Tucson Development Standards
Transportation Access Management Guidelines for the City of Tucson, Arizona
City of Tucson Department of Transportation Roadway Development Policies
Information about the public transit system, including the location of bus stops, is available online at http://dot.ci.tucson.az.us/transit/index.html

4.0 Attachments

NA

Rev 1/21/10

Vehicle Assignment for each mode

1. Sun Tran vehicles are assigned to one of two storage and maintenance facilities (i.e. Northwest Yard and South Yard) based upon fuel usage type and need. Weekday and Saturday service operates from two (2) facilities to achieve system cost efficiency. Sunday service operates only from the Northwest facility. Buses are spread evenlythroughout the transit system so that the average age of buses assigned to each route approximates the average age of the available bus fleet. All buses are equipped equally with air conditioning and automated stop announcement systems and ramps for personswith disabilities.

   Vehicles individually are assigned based upon the length (time) of the route block and availability at each facility.

2. Sun Link vehicles are assigned to unique storage and maintenance facility. All streetcars are equipped equally with air conditioning and automated stop announcement systems, and ramps for persons with disabilities. Vehicles are assigned individually based upon the length (time) of the route block and availability. All vehicles are the same age.

Service Development and Expansion Policy of Frequent Transit Network (FTN), and On-Going Evaluation

Service development (Sun Tran and Sun Link) involves the consideration of a number of factors including ridership productivity, transit/pedestrian friendly streets, density of transit dependent population and activities, relationship to the Regional Transportation Authority's transportation plan, relationship to major transportation developments, land use connectivity, and transportation demand management.

The City of Tucson in collaboration with the City of Tucson's Transit Task Force evaluated and determined policy parameters of a Frequent Transit Network (FTN). These policies define performance metrics and criteria for routes to be included or removed from the FTN.

During project prioritization processes, the Title VI maps for minority and low-income populations are reviewed to ensure equity in the distribution for transit expansion. Additionally, service equity analyses are completed if the changes result in a Major Service Change.

Requirement to Collect and Report Demographic Data

(CHAPTER IV-7, Number 5)

☐ Demographic and service profile maps and charts

Demographic and service profile maps and charts

The maps of the Sun Tran service area encompass the Sun Link service area. The service area maps include regular fixed bus routes, express fixed bus routes, and the streetcar. In addition, the service area reflects most of the Sun Van complementary ADA paratransit service area. The U.S. Census data used Pima County. The Pima County population and income data was identical to the Tucson Metropolitan Statistical Area.

- The *Amenities – Bus Shelters* map identifies routes, transit stops and stations, maintenance and garage, and administrative buildings, as well as major activity centers, and major streets and highways. The minority populations are identified by U.S. Census tracts using the American Community Survey (ACS) 5-year estimates data for 2016-2020.

- The *Minority Populations* in Sun Tran Service Area identifies the minority populations by U.S. Census tracts using the ACS 5-year estimate data for 2016 – 2020 and hatching those census areas that were greater than the Pima County averages for the identified populations. Areas equal to or less than the Pima County averages were not symbolized.

- The minority route designations were determined from the 2022 City of Tucson On-Board Survey responses. The system averages for each identified minority population were calculated and used as the threshold in determining minority routes. If any of the identified minority populations was greater than the system average, the route was designated a minority route.

- The *Low-Income Population* map identifies low-income households below the poverty level, using the U.S. Census tracts ACS 5-year estimates data for 2016–2020. Pima County Average is 14.9%. The median family income for Pima County is $55,023. Sun Tran Special Services Office qualifies economy fare low-income users based on information from the Arizona Department of Economic Security, Social Security, or the
  U.S. Department of Labor Lower Living Standard Income Level (LLLSIL) table based on family size and income. For example, a family of three, yearly lower income standard level, is allowed a maximum household income of $39,809 to qualify for the Economy farelow-income fare.

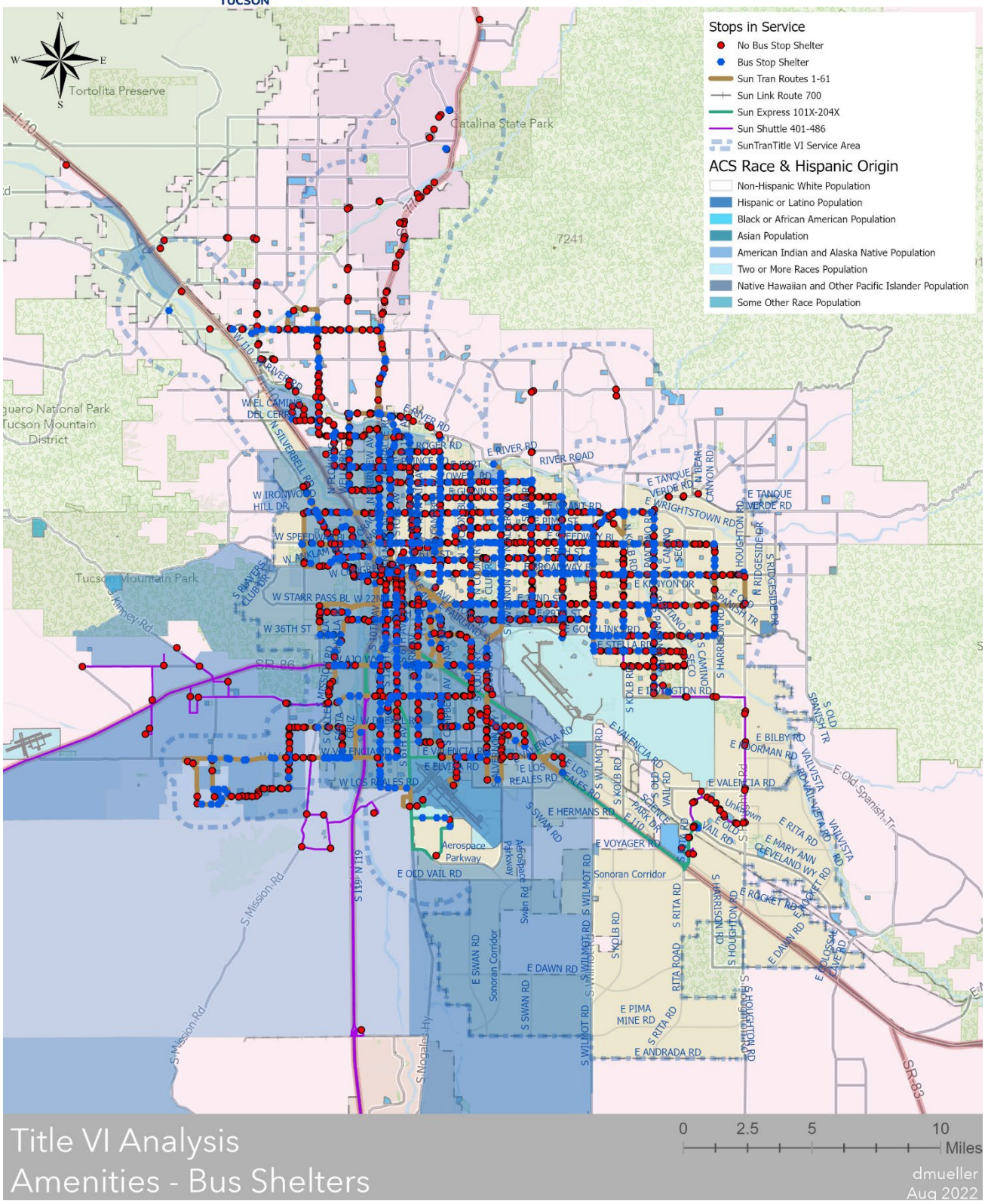
- □ Demographic ridership and travel patterns, collected by surveys

Demographic ridership and travel patterns, collected by surveys

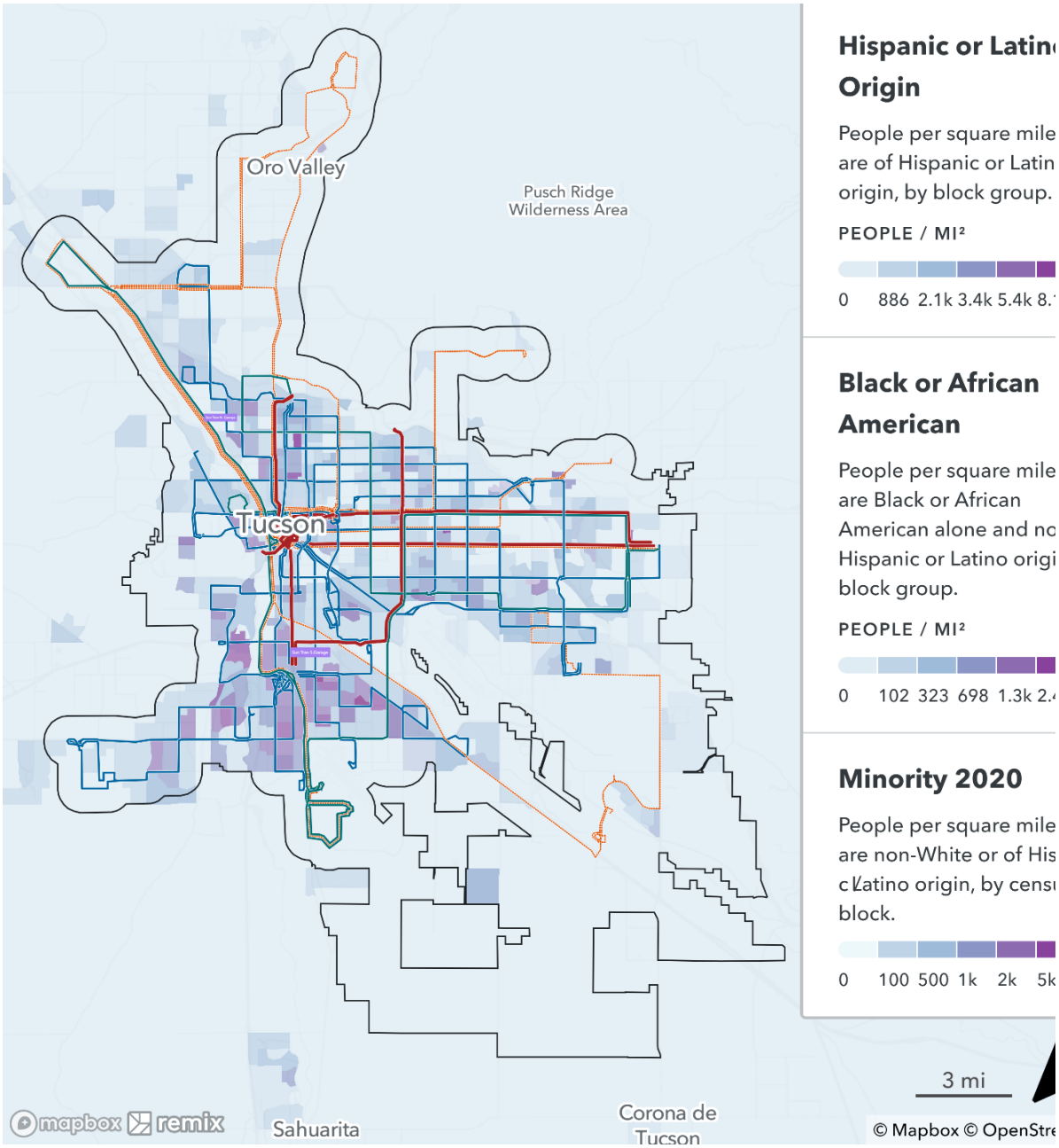
The 2022 City of Tucson On Board Transit Survey Report (Appendix B) was completed by ETC Institute for the City of Tucson/RTA, August 2022. Passengers were interviewed on-board Sun Tran, Sun Link, and the regional Sun Shuttle service The survey was designed as a face-to-face interview using tablet PCs and if needed, printed surveys. Up to 36 unique questions were asked of each passenger interviewed. The on-screen mapping feature allowed for real-time geocoding and addressing for origin and destination questions as well as helping determine ridership travel patterns. The tablet PC format allowed the surveyor to permit the riders to select answers independently for sensitive demographic questions. For additional details, please see the 2022 City of Tucson On-Board Transit Survey Report.

The survey contractor collected over 7,699 interviews with 6,290 for Sun Tran, including Express Routes, and 1,409 for Sun Link. Sun Van, paratransit services, was not included in this survey. Based on the total surveys collected, Forty-four percent (44%) of weekday riders' origin place type was "Home" and forty percent (40%) of riders' destination place type was "Home," with "Workplace" being only fifteen percent (15%) of origins and sixteen percent (16%) of destinations. Nine percent (9%) of riders were coming from and/or going to school (K-12 and college). With the Sun Link going through the University of Arizona campus, it has the highest amount of "College" trips made with thirty percent (30%) of trips originating from a college and twenty-four percent (24%) of trips having a destination at a college. Most passengers walk to their first stop from their origin location (94%), and to their destination from their final stop (95%). Not only do most passengers walk to and from their first and last boarding and alighting locations, but over half of all passengers interviewed (58%) take only one vehicle on their one-way-trip without having to use transfers. During the survey, fare was not being collected. If fare had been collected, over half (54%) the passengers interviewed would have paid regular fare, and half (48%) of passengers would have used a SunGo plastic card to pay their fare. The average passenger rides transit at least five days a week (72%), has been riding transit more than two years (61%), does not use any additional tools to plan their trip(s) (36%), and believes that adding more weekend service is the most important transit enhancement (28%). Passengers' individual demographic responses show that over half of passengers do not possess a valid driver's license (51%), they do not have any disabilities limiting travel (90%), are between 18-44 years of age (66%), are White (63%), non-Hispanic (63%), and male (62%). They are also employed (60%) and non-students (70%). Regarding passengers' households, fifty percent of passengers do not have any vehicles available to their household. Seventy-one percent live in households with three or less people, thirty-seven percent have one or less employed household members, and fifty-eight percent live in households that make less than $24,999 annually. For additional details, please see the 2022 City of Tucson On-Board Transit Survey Report available at:

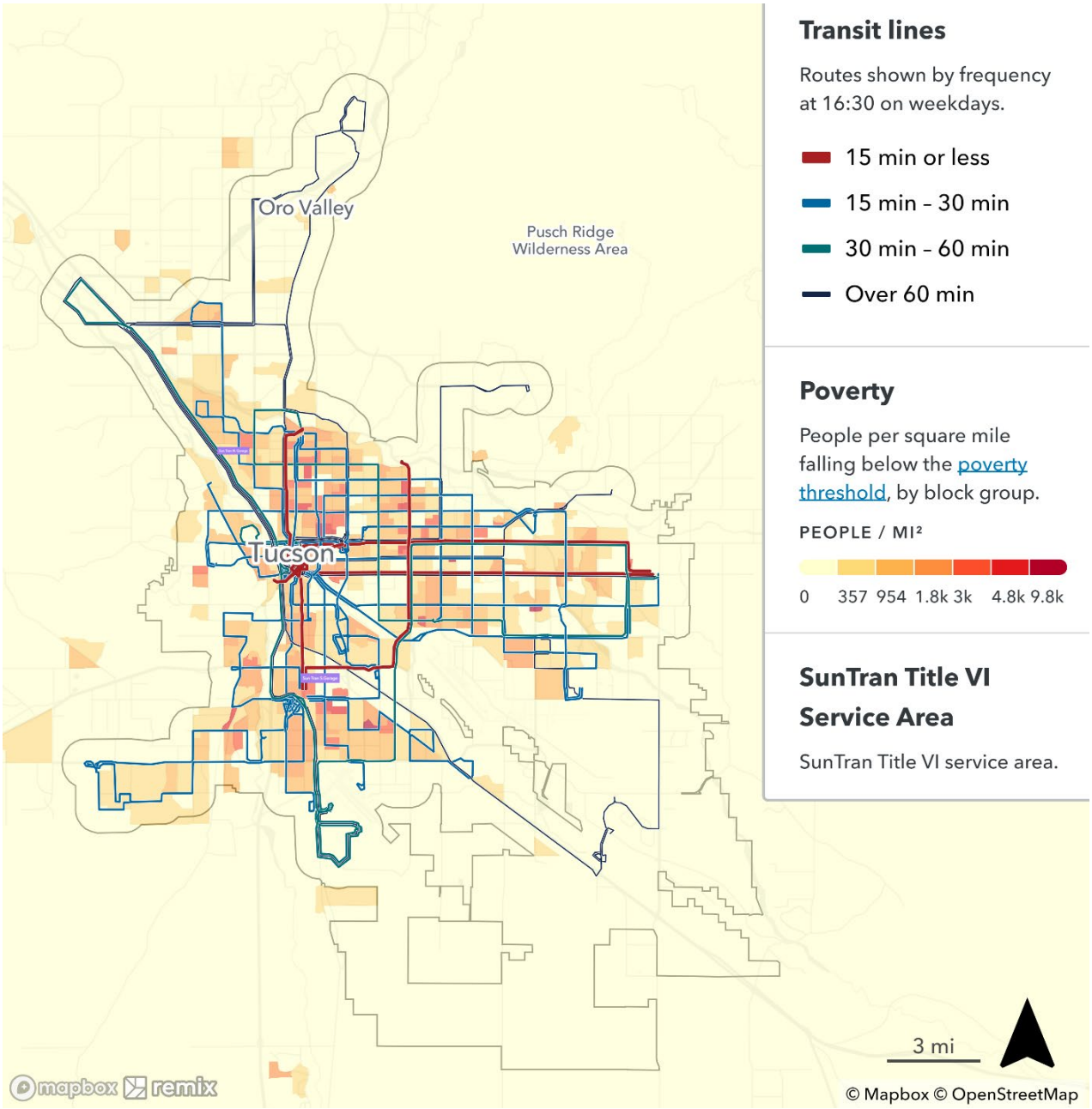
Percentage Minority greater than System Average By Route						
Routes	American Indian / Alaskan Native	Asian	Black / African American	Native Hawaiian / Pacific Islander	Hispanic	Minority Route
Sun Tran System Average	**10.76%**	**4.37%**	**12.77%**	**0.82%**	**35.62%**	-
1	1.01%	2.39%	2.11%	3.70%	0.63%	Yes
2	3.03%	1.02%	1.17%	3.70%	0.89%	Yes
3	2.16%	3.41%	5.28%	5.56%	1.50%	Yes
4	6.06%	6.48%	6.92%	7.41%	2.42%	Yes
5	0.87%	4.10%	1.88%	0.00%	0.53%	-
6	2.89%	1.02%	2.58%	7.41%	1.16%	Yes
7	3.03%	2.39%	5.75%	1.85%	1.21%	Yes
8	5.34%	2.39%	7.39%	5.56%	1.93%	Yes
9	3.17%	3.75%	5.16%	3.70%	1.25%	Yes
10	1.88%	2.05%	1.06%	3.70%	0.92%	-
11	8.23%	4.78%	5.52%	0.00%	1.81%	Yes
12	3.17%	0.68%	2.00%	0.00%	1.28%	-
15	0.72%	2.39%	1.53%	1.85%	0.51%	Yes
16	3.46%	2.39%	5.40%	5.56%	1.93%	Yes
17	5.77%	4.78%	5.63%	9.26%	1.86%	Yes
18	12.27%	1.02%	6.34%	1.85%	2.43%	Yes
19	1.30%	1.37%	1.64%	0.00%	0.47%	-
21	1.59%	0.68%	0.82%	0.00%	0.44%	-
22	0.14%	0.00%	0.59%	0.00%	0.12%	-
23	3.61%	0.68%	1.76%	0.00%	0.95%	-
24	2.60%	0.00%	0.47%	0.00%	0.57%	-
25	3.61%	2.72%	3.64%	3.70%	1.16%	Yes
26	1.30%	0.00%	0.47%	1.85%	0.66%	Yes
27	3.03%	0.68%	0.59%	0.00%	0.59%	-
29	6.20%	0.68%	1.17%	1.85%	0.74%	Yes
34	2.74%	2.38%	4.69%	7.41%	1.30%	Yes
37	0.72%	1.36%	2.00%	1.85%	0.29%	Yes
50	1.44%	0.00%	0.35%	0.00%	0.32%	-
61	1.30%	0.34%	0.59%	0.00%	0.29%	-
Sun Link (700)	6.92%	42.66%	15.14%	18.52%	5.35%	Yes
101X	0.00%	0.00%	0.00%	0.00%	0.02%	-
102X	0.00%	0.00%	0.00%	0.00%	0.02%	-
103X	0.00%	0.34%	0.12%	0.00%	0.00%	-
104X	0.00%	0.00%	0.00%	0.00%	0.02%	-
105X	0.00%	0.00%	0.00%	0.00%	0.00%	-
107X	0.00%	0.00%	0.12%	0.00%	0.00%	-
108X	0.00%	0.00%	0.00%	0.00%	0.00%	-
109X	0.00%	0.00%	0.00%	0.00%	0.00%	-
110X	0.00%	0.00%	0.00%	0.00%	0.00%	-
201X	0.00%	0.00%	0.00%	0.00%	0.02%	-
203X	0.14%	0.68%	0.00%	3.70%	0.05%	Yes
204X	0.00%	0.34%	0.12%	0.00%	0.00%	-


Stops in Service
No Bus Stop Shelter
Bus Stop Shelter
Sun Tran Routes 1-61
Sun Link Route 700
Sun Express 101X-204X
Sun Shuttle 401-486
SunTranTitle VI Service Area
ACS Race & Hispanic Origin
Non-Hispanic White Population
Hispanic or Latino Population
Black or African American Population
Asian Population
American Indian and Alaska Native Population
Two or More Races Population
Native Hawaiian and Other Pacific Islander Population
Some Other Race Population
Tortolita Preserve
Catalina State Park
Tucson Mountain Park
Aerospace Parkway
Sonoran Corridor
Title VI Analysis
Amenities - Bus Shelters
0 2.5 5 10
Miles
dmueller
Aug 2022

Sun Tran Title VI Service Area with Minority Populations indicated per square mile in the service area. The darker the color, the greater the population. Sun Tran routes and Sun Shuttle Route 450 are reflected on the map. Red lines indicate routes with 15 minute or less frequent service, blue lines indicate routes with 15- 30 minutes frequent service, green and orange routes are express or shuttle route with 30 - 60 minutes or greater frequency.



Sun Tran Title VI Service Area with low-income populations falling below the US Census poverty thresholds indicated per square mile in the service area. The darker the color, the greater the population. Sun Tran routes and Sun Shuttle Route 450 are reflected on the map. Red lines indicate routes with 15 minute or less frequent service, blue lines indicate routes with 15- 30 minutes frequent service, green and black routes are express or shuttle route with 30 - 60 minutes or greater frequency.



Requirement to Monitor Transit Service

(CHAPTER IV-9, Number 6)

Results of their monitoring program and report, including evidence that the board or other governing entity or official(s) considered, was aware of the results, and approved the analysis

Monthly Operating Reports (MOR) for Sun Tran, Sun Van, and Sun Link are found in **Appendix C**. City of Tucson, Mayor and Council meeting agendas with Legal Action Reports (LAR) that reflect the Council's consideration, awareness, and approval of the monitoring program is found in **Appendix D**.

Requirement to Evaluate Service and Fare Changes

(CHAPTER IV-10, Number 7)

□ A description of the public engagement process for setting the "major service change policy," disparate impact policy, and disproportionate burden policy

Title VI Public Engagement Process

The existing Title VI Policies (*Policy and Procedure for Solicitation and Consideration of Public comment on Fare Changes and Major Service Changes on Public Transportation,* Resolution 22127) adopted August 6, 2013, were revised and public comment was solicited.

There were seven (7) open house meetings and one (1) virtual meeting between July 11, 2022, and July 21, 2022, with a total attendance of 54 individuals.

Public Meeting Schedule – 2022 Title VI Policies for Major Service and Fare Changes			
7/11/2022	12-1pm	Flowing Wells Library	7
7/12/2022	12-1pm	Ward 2 Office	1
7/13/2022	5-6pm	Miller-Golf Links Library	3
7/14/2022	5:30-6:30pm	Ward 1 Office	8
7/18/2022	1-2pm	Quincie Douglas Library	6
7/19/2022	1-2pm	Pascua Yaqui Health & Social Service Family Center	4
7/20/2022	12:30-1:30pm	Joel D. Valdez Main Library	20
7/21/2022	6-7pm	Virtual Meeting	5
		Total Number of Attendees	**54**

PUBLIC ENGAGEMENT PROCESS

Public comment process

The community was encouraged to comment on the existing Fare Changes and Major Service Change Policies, which included the thresholds for Disparate Impact and DisproportionateBurden Policies:

- Attend a public meeting to learn about the proposed changes and submit comments
- Via mail or email, or fill out an online comment form
- Post comments on Facebook or Twitter
- Call customer service at (520) 792-9222

Below are details regarding the community open house meetings:

- There was a total of eight (8) community meetings held, one in each Ward as well as the Pascua Yaqui Indian Reservation, one was held at the University of Arizona, and a virtual meeting to educate the public and obtain public comments on the Fare Change, Major Service Change, Disparate Impact, and Disproportionate Burden Policies.
- Every effort was made to host public meetings at locations impacted by future proposed changes and at a variety of times and days to accommodate the public. All locations are along transit services, including Sun Tran, Sun Shuttle, and/or Sun Link.
- At least two (2) weeks advance notice was provided to ensure all employees, passengers, and the public was informed. Multiple notifications and feedback techniques were utilized.

Public Notification Process

Notification of public meetings and solicitation of comments included the following strategies at least two (2) weeks prior to the first meeting:

- Notices were posted on the websites, which include suntran.com, sunshuttle.com, sunlinkstreetcar.com, and sunvan.com.
- Notices were posted on social media pages for Sun Tran and Sun Link.
- Media releases were distributed to local media print, radio and television media outlets.
- Posters and information cards were available on all transit vehicles.

Other notification strategies, such as posters and information available on the electronic monitors at each transit center, emails distributed through list serves, were utilized, soliciting public comment.

At the Public Meetings

- Staff was available at all times to explain the policies and allow the public to ask questions. The presentations were informal due to the number of attendees at each meeting and approaching individuals at the transit centers.
- Written materials' detailing the policies was available.
- Meetings were held in accessible locations.
- All attendees were asked to sign-in, and comment cards were provided for attendees.

Updating Current Policy and Consideration of Public Comments

Staff prepared a written summary of all comments received and any suggested changes to the Fare Change, Major Service Change, Disparate Impact, and Disproportionate Burden policies once the public comment deadline is passed. This summary was provided to the Sun Tran General Manager and Assistant General Managers for review and approval before forwarding to the City of Tucson's Department of Transportation and Mobility (DTM). DTM provides the summary to Mayor and Council for their review. Staff spoke to a total of fifty-four (54) people, who attended one of our eight (8) open houses. Spanish speaking staff attended each open house event to provide verbal, and written translation if necessary. The community made comments on all things transit; many different topics were brought up at the public input open houses, regarding the Title VI policies all comments were positive. Eleven (11) comments written comments were received. An additional eighteen (18) community members took the opportunity to submit a paper survey.

Policies were presented to Mayor and Council for review and approval.

Major Service & Fare Change Policy, Disparate Impact, and Disproportionate Burden Policy

City of Tucson Policy and Procedure for Major Service and Fare Changes on Public Transportation

I. Purpose of the Policy:

The Federal Transit Administration (FTA) Circular 4702.1 B, *"Title VI Requirements and Guidelines for Federal Transit Administration Recipients"* effective October 1, 2012) requires that all FTA recipients who operate 50 or more fixed route vehicles in peak service and serve a population of 200,000 or greater, evaluate any fare change or any major service change, during the planning and programming stages.

When planning fare changes or major services changes, the City of Tucson shall consider if any adverse effect would occur as a result of the fare change or major service change. The City of Tucson shall consider the degree of adverse effects (if any), analyze those effects, and discuss any necessary minimization and/or mitigation that need to be considered as a result of the proposed fare change or major service change.

The Major Service and Fare Change Policy defines thresholds for determining whether potential major service or fare changes will have an adverse effect based on possible:

Disparate impact(s) (as determined by an analysis of race, color, or national origin within the service area); or

Disproportionate burden(s) (as determined by an analysis of low-income populations within the service area).

II. Policy Statement:

It is the policy of the City of Tucson to solicit and consider public comment from private transportation providers, private citizens, and appropriate boards, committees, and commissions before implementing fare changes and/or major service changes pursuant to the City of Tucson's public transportation system. To this end, the Mayor and Council have adopted the following citizen participation related public hearing policies and procedures.

Ill. Requirements:

a) Fare Changes:

A public hearing must be held if there is any fare change to any of the public transportation modes (Sun Tran, Sun Van, or Sun Link). For changes to existing transit fares, the FTA requires all City of Tucson transit providers (Sun Tran, Sun Van, and Sun Link) to conducta Fare Equity Analysis for all proposed fare changes.

b) Major Service Changes:

A public hearing must be held if there is any major service change to any of the public transportation modes (Sun Tran, Sun Van, or Sun Link).

For all major service changes, the FTA requires all City of Tucson transit providers (e.g., Sun Tran, Sun Van, and Sun Link) to develop guidelines and thresholds for what it considers a "major" service change. For major service changes, the FTA requires the City of Tucson to conduct a Service Equity Analysis, which includes an analysis of adverse effects relating to possible disparate impacts and disproportionate burden. It is the City of Tucson's policy to conduct a Service Equity Analysis for any proposed major service changes.

The following is considered a major service change (unless otherwise noted under "Exemptions") and will be evaluated in accordance with the regulatory requirements set forth in FTA Circular 4702.1B:

An equity analysis is required for any major service change. A major service change is defined by the criteria below: major service change (thresholds) is defined as any change in service from the previous fiscal year that would add or eliminate more than:

1. When the route revenue miles on any individual route or combination of routes, increases or decreases by 25% or more when compared to the previous fiscal year.

2. When the route revenue hours on any individual route or combination of routes increases or decreases by 25% or more when compared to the previous fiscal year.

Exemptions:

The major service change thresholds exclude any changes to service that are caused by the following:

- Initiation/Discontinuance of Temporary or Demonstration Services - The initiation or discontinuance of a temporary transit service or demonstration service that will be or has been in effect for less than one year.
- Initiation/Discontinuance of any Promotional Fares that will be or have been in effect for a maximum of six months.
- Natural or Catastrophic Disasters - Forces of nature such as earthquakes, wildfires, or other natural disasters or human-caused catastrophic disasters that may force the suspension of transit service for public safety or technical events.
- Temporary Route Detours – A short-term change to a route caused by road construction, routine road maintenance, road closures, emergency road conditions, fiscal crisis, civil demonstrations, or any uncontrollable circumstance.
- When a segment of one route is moved to another route but the route miles or hours do not change by 25%.

c) <u>Public Notice Requirements:</u>

Prior to the implementation of any fare change or major service change that falls within the levels established above, notices of public hearing will be published at least fourteen (14) days prior to the hearing and will comply with the City of Tucson guidelines for notice of Mayor and Council meetings. The notices will contain the description of the contemplated fare change or major service change, as appropriate, and the time and place of the hearing. Any interested citizen may address the governing body related to the proposed fare change or major service change.

d) Applicability to Third-Party Contract Recipients:

Any agency, firm, or governmental jurisdiction, which operates public transit service within the Tucson urbanized area utilizing FTA funds provided through the City of Tucson, shall follow the above process to solicit and consider public comment prior to any fare change or major service change.

IV. Definitions:

Adverse Effects - The City of Tucson shall define and analyze adverse effects related to major changes in transit service. Adverse effects are measured by the change between the existing and proposed service levels that would be deemed significant. Changes in service that have an adverse effect and that may result in a disparate impact include reductions in service (eliminationof route, short lining a route, rerouting an existing route, increase in headways). Elimination of a route will generally have a greater adverse impact than a change in headways. Additions to service may also result in disparate impacts, especially if they come at the expense of reductions in service on other routes.

Disparate Impact – Refers to a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where City of Tucson's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin.

Disproportionate Burden – Refers to a neutral policy or practice that disproportionately affects low-income populations' more than non-low-income populations. A finding of disproportionate burden requires the City of Tucson to evaluate alternatives and mitigate burdens where practicable.

Low-Income Person - Means a person whose median household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines.

Major Service Change – Is any service change from the previous fiscal year that would increase or decrease more than twenty-five percent (25%) of the revenue route miles or revenue route hours on any individual route or combination of routes.

Minority Population – Means any readily identifiable group of minority persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient populations (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy, or activity.

Predominantly Minority Area - Means a geographic area, such as a neighborhood, Census tract, block or block group, or traffic analysis zone, where the proportion of minority persons residing in that area exceeds the average proportion of minority persons in the recipient's service area.

V. Policies:

a) Fare Change Policy

For changes to existing transit fares, the FTA requires all City of Tucson (Sun Tran, Sun Van, and Sun Link) transit providers to conduct a fare equity analysis for all potential transit fare adjustments. It is the City of Tucson's policy to conduct a Fare Equity Analysis for all proposed fare changes.

b) Major Service Change Policy

For all major service changes, the FTA requires all City of Tucson transit providers (Sun Tran, Sun Van, and Sun Link) to develop guidelines and thresholds for what it considers a "major" service change to be. For major service changes, the FTA requires the City of Tucson to conduct a Service Equity Analysis, which includes an analysis of adverse effects relating to possible disparate impacts and disproportionate burden. It is the City of Tucson's policy to conduct a Service Equity Analysis for any proposed major service changes.

b) Disparate Impact Policy

The purpose of the Disparate Impact Policy is to establish a threshold, which identifies when adverse effects of any fare change or major service change that is borne disproportionately by minority populations.

For the purpose of this policy, minority population means any readily identifiable group of minority persons who live in geographic proximity and in residential land use areas within Census tracts where the percentage of minority persons is higher than the Sun Tran service area average.

A disparate impact occurs if a proposed fare or major service change requires a minority population to bear adverse effects by twenty percent (20%) or more than the adverse effects borne by the non-minority population.

If the City of Tucson finds a potential disparate impact, the transit agency will take steps to avoid, minimize or mitigate impacts then re-analyze the modified service plan to determine whether the impacts were avoided, minimized or mitigated. If the City of Tucson, chooses not to alter the proposed changes, the transit agency may implement the fare or service change if there is substantial legitimate justification for the change and the transit agency canshow that there are no alternatives that would have less of an impact on the minority population and would still accomplish the agency's legitimate program goals.

d) Disproportionate Burden Policy

The purpose of this policy is to establish a threshold, which identifies when adverse effects of any fare or major service change are borne disproportionately by low-income populations.

A disproportionate burden occurs if a proposed fare or major service change requires a low income population to bear adverse effects by twenty percent (20%) or more than the adverse effects borne by the non- low income population.

If the City of Tucson finds a potential disproportionate burden, the transit agency will take steps to avoid, minimize or mitigate impacts then reanalyze the modified service plan to determine whether the impacts were avoided, minimized or mitigated. If the City of Tucson chooses not to alter the proposed changes, the agency may implement the service or fare change if there is substantial legitimate justification for the change and the agency can show that there are no practical alternatives that would have less of an impact on the low-income population and would still accomplish the agency's legitimate program goals.

□ Results of service and/or fare equity analyses conducted since the last Title VI Program submission, including evidence that the board or other governing entity or official(s) considered, was aware of, and approved the results of the analysis

Title VI – Service & Fare Equity Analysis Completed – City of Tucson Mayor & Council Legal Action Reports (LAR) in Appendix D				
	Service or Fare Equity Analysis Completed	**Presented / approved**	**Resolution Number**	**Results**
1	Proposed Major Service Changes for Fiscal Year 2021. Route 22, Grande	22 Sept 2020	23239	*Approved analysis on Consent Agenda item 7.i.*
2	Fare Equity Analysis for Suspension of Fares	27 Sept 2022		
3	Major Service Change Equity Analysis for Reduction of Express Services	27 Sept 2022		

Legal Action Reports for the abovementioned documents are included in Appendix D. These documents reflect the Mayor and Council Agenda, reflecting any presentations (awareness), questions, and/or discussions (consideration), and motions or actions taken (approval).

Approval of the Title VI Program

□ A copy of board meeting minutes, resolution, or other appropriate documentation showing the board of directors or appropriate governing entity or official(s) responsible for policy decisions reviewed and approved the Title VI Program.

The Title VI Program has been submitted to the City of Tucson Mayor and Council, as the appropriate governing officials responsible to approve this document prior to its submission to the FTA.

A copy of the City of Tucson Mayor and Council Agenda, Legal Action Report (LAR), and Resolution for the Regular Meeting of September 27, 2022, is attached. These documents reflectthe Council's consideration, awareness, and evidence the Council's approval of the Title VI Program and Policies, including but not limited to the Major Service Change policy, Disparate Impact and Disproportionate Burden policies, and results of the City of Tucson's systemwide Service Standards and Policies monitoring program, all of which are set forth in the 2022 Title VI Program.

Appendix A: Federal FTA Certifications and Assurances Signature Page

CITY OF TUCSON | TUC | 1667

Certifications & Assurances | FY 2022 C&A Affirmations

Recipient Details

Recipient ID
1667

Recipient Name
CITY OF TUCSON

Certification and Assurance Information

Fiscal Year 2022
Assigned Date 2/3/2022
Due Date 5/4/2022

Original Certification Date 2/8/2022
Latest Certification Date 2/8/2022

Published Certifications and Assurances

FTA CERTIFICATIONS AND ASSURANCES

Public Transportation Agency Safety Plan (PTASP)

Applicants and recipients of Section 5307 grants and rail transit agencies that are subject to the State Safety Oversight Program must certify to Category 2: Public Transportation Agency Safety Plans (PTASP). The deadline for certification was July 20, 2020, however, in light of the extraordinary challenges presented by the COVID-19 public health emergency, FTA issued a Notice of Enforcement Discretion for the PTASP regulation (49 CFR Part 673). FTA will refrain from taking enforcement action until July 21, 2021 for applicants and recipients unable to certify compliance with the PTASP regulation before July 20, 2021. While applicants and recipients are encouraged to certify compliance as soon as reasonably practicable under the current circumstances caused by the COVID-19 public health emergency, those who do not certify compliance until July 20, 2021 remain eligible for Chapter 53 grant funds.

List of All Applicable Agencies

PTASP Technical Assistance Center

Certifications and Assurances

Certification History

Certification Date: 2/8/2022 | Official: Robin Raine | Attorney: Damian Fellows

Category	Title	Certified
01	Certifications and Assurances Required of Every Applicant	✓
02	Public Transportation Agency Safety Plans	✓
03	Tax Liability and Felony Convictions	✓
04	Lobbying	✓
05	Private Sector Protections	✓
06	Transit Asset Management Plan	✓
07	Rolling Stock Buy America Reviews and Bus Testing	✓
08	Urbanized Area Formula Grants Program	✓
09	Formula Grants for Rural Areas	✓
10	Fixed Guideway Capital Investment Grants and the Expedited Project Delivery for Capital Investment Grants Pilot Program	✓
11	Grants for Buses and Bus Facilities and Low or No Emission Vehicle Deployment Grant Programs	✓
12	Enhanced Mobility of Seniors and Individuals with Disabilities Programs	✓
13	State of Good Repair Grants	✓
14	Infrastructure Finance Programs	✓
15	Alcohol and Controlled Substances Testing	✓
16	Rail Safety Training and Oversight	✓
17	Demand Responsive Service	✓
18	Interest and Financing Costs	✓
19	Cybersecurity Certification for Rail Rolling Stock and Operations	✓
20	Tribal Transit Programs	✓
21	Emergency Relief Program	✓

1 – 21 of 21

Documents

Existing Documents

Document	Description	Uploaded By	Date
No items available			

Affirmation of Applicant

Affirmation of Applicant BY SIGNING BELOW, on behalf of the Applicant, I declare that it has duly authorized me to make these Certifications and Assurances and bind its compliance. Thus, it agrees to comply with all federal laws, regulations, and requirements, follow applicable federal guidance, and comply with the Certifications and Assurances as indicated on the foregoing page applicable to each application its Authorized Representative makes to the Federal Transit Administration (FTA) in the federal fiscal year, irrespective of whether the individual that acted on his or her Applicant's behalf continues to represent it.

The Certifications and Assurances the Applicant selects apply to each Award for which it now seeks, or may later seek federal assistance to be awarded by FTA during the federal fiscal year.

The Applicant affirms the truthfulness and accuracy of the Certifications and Assurances it has selected in the statements submitted with this document and any other submission made to FTA, and acknowledges that the Program Fraud Civil Remedies Act of 1986, 31 U.S.C. § 3801 et seq., and implementing U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR part 31, apply to any certification, assurance or submission made to FTA. The criminal provisions of 18 U.S.C. § 1001 apply to any certification, assurance, or submission made in connection with a federal public transportation program authorized by 49 U.S.C. chapter 53 or any other statute.

In signing this document, I declare under penalties of perjury that the foregoing Certifications and Assurances, and any other statements made by me on behalf of the Applicant are true and accurate.

Official's Name Robin Raine

☑ I accept the above

Certification Date Feb 03, 2022

Affirmation of Attorney

Affirmation of Applicant's Attorney As the undersigned Attorney for the above-named Applicant, I hereby affirm to the Applicant that it has authority under state, local, or tribal government law, as applicable, to make and comply with the Certifications and Assurances as indicated on the foregoing pages. I further affirm that, in my opinion, the Certifications and Assurances have been legally made and constitute legal and binding obligations on it.

I further affirm that, to the best of my knowledge, there is no legislation or litigation pending or imminent that might adversely affect the validity of these Certifications and Assurances, or of the performance of its FTA assisted Award.

Attorney's Name Damian Fellows

☑ I accept the above

Certification Date Feb 08, 2022

CANCEL

Appendix B: 2022 City of Tucson On-Board Survey

2022 Tucson On-Board Survey

FINAL REPORT
AUGUST 15, 2022

Prepared for The City of Tucson ETC Institute

EXECUTIVE SUMMARY

The 2022 Transit On-Board Origin-Destination (OD) Survey was conducted by ETC Institute on behalf of The City of Tucson and collected data from Sun Tran, Sun Link, and Sun Shuttle passengers. The data collection began on January 10, 2022 and ended March 4, 2022. This report will provide an overview and detailed description of the 2022 On-Board OD Survey process. The report covers the survey findings, purpose and background, design, sampling, administration methodology, and quality control process.

OBJECTIVES

The primary objectives for the survey were as follows:

- Compile statistically accurate information about the use of transit in the region by Sun Tran, Sun Link, and Sun Shuttle passengers for future planning.
- Collect and provide valid and current transit rider travel patterns, demographic information for Title VI reporting, and transit service characteristics.
- Provide data for updating the Pima Association of Governments' (PAG) Regional Travel Model.

SURVEY METHODOLOGY SUMMARY

Origin Destination Survey

For this study, ETC Institute conducted the on-board passenger intercept interview surveys using tablet PCs (tablets). ETC Institute developed the survey in cooperation with Sun Tran and The City of Tucson (The City). Passengers were selected for participation using a random sampling protocol built into the survey program, and passengers' responses were captured in real time. For those passengers who elected to participate, the survey was administered in two portions. The first portion captured a detailed account of the passenger's complete one-way trip, and the second captured various usage and demographic data. In the initial section, the survey program's mapping function allowed for the geocoding of addresses using information provided by the passenger. Passengers were able to see on-screen maps and confirm the accuracy of the location data collected. At the end of the first portion, passengers confirmed a comprehensive summary of their complete origin-to-destination one-way trip. In the second portion passengers were asked questions pertaining to their transit usage, as well as personal and household demographics. Upon completion of the survey passengers were thanked for their time and willingness to participate.

ETC Institute interviewers were also available to answer passenger questions, the most common of which involved the need to ask for personal information and how the information gathered would be used. Passengers were assured all information collected would be kept strictly confidential, and that The City intended to use the information for research purposes designed to improve their system, and that the information would never be used for any commercial purpose.

On-to-Off Survey

In addition to conducting the intercept survey, ETC conducted an On-to-Off survey on all routes with over 2,000 average daily riders. These routes included the Sun Link and Sun Tran routes 4,8,11,16, and 18. The on-to-off data was collected to expand the origin-destination survey data.

The on-to-off count administrators (counters) were responsible for the distribution and collection of the on-to-off count cards. There were two counters assigned to each bus with both counters covering the back of the bus due to passengers only being allowed to board the bus from the rear entrances. One counter scanned and distributed cards printed with barcodes to boarding passengers while the other counter collected and scanned the cards as passenger alighted. The counters used tablets equipped with hand-held scanners which were used to capture the boarding and alighting locations of passengers.

For the Sun Link (Rail), counters asked passengers at which stop they entered and exited the train, if not observed. The rationale for this was two-fold. First, since a significantly higher number of rail passengers know the stop names along routes, the ability to verbally collect on-to-off stop data from rail passengers was significantly more efficient than it would have been on busses. Second, the logistics of having staff at each door handling both the boarding and alighting activity would have been overwhelming for the counters.

Weekday Transit Trip Characteristics and Passenger Profile

The following bullets describe the Tucson region's passenger profile for weekday (Monday through Friday) riders.

- Forty-four percent of weekday riders' origin place type was "Home" and forty percent of riders' destination place type was "Home," with "Workplace" being only fifteen percent of origins and sixteen percent of destinations. Nine percent of riders were coming from and/or going to school (K-12 and college). With the SunLink going through the University of Arizona campus, it has the highest amount of "College" trips made with thirty percent of trips originating from a college and twenty-four percent of trips having a final destination at a college.
- Most passengers walk to their first stop from their origin location (94%), and to their destination from their final stop (95%). Not only do most passengers walk to and from their first and last boarding and alighting locations, but over half of all passengers interviewed (58%) take only one vehicle on their one-way-trip without having to use transfers.
- During the survey, fare was not being collected. If fare had been collected, over half (54%) the passengers interviewed would have paid regular fare, and nearly half (48%) of passengers would have used a SunGo plastic card to pay their fare.
- The average passenger rides transit at least five days a week (72%), has been riding transit more than two years (61%), does not use any additional tools to plan their trip(s) (36%), and believes that adding more weekend service is the most important transit enhancement (28%).
- Passengers' individual demographic responses show that over half of passengers do not possess a valid driver's license (51%), they do not have any disabilities limiting travel (90%), are between 18-44 years of age (66%), are White(63%), Non-Hispanic (63%), and male (62%). They are also employed (60%) and non-students (70%).
- Regarding passengers' households, fifty percent of passengers do not have any vehicles available to their household. Seventy-one percent live in households with three or less people , thirty-seven percent have one or less employed household members, and fifty-eight percent live in households that make less than $24,999 annually.

Weekend Transit Trip Characteristics and Passenger Profile

The following bullets describe the Tucson region's passenger profile for weekend (Saturday and Sunday) riders.

- Fifty-three percent of weekend riders' origin place type was "Home" and twenty-six percent of riders' destination place type was "Home." Passengers coming from and going to work was less than weekday trips with "Workplace" being only ten percent of origins and fifteen percent of destinations.
- Similar to weekday passengers, most weekend passengers walk to their first stop from their origin location (92%), and to their destination from their final stop (95%). More passengers make transfers on the weekends compared to weekdays with fifty-three percent of passengers having to make at least one transfer.
- During the survey, fare was not being collected. If fare had been collected, nearly half (48%) the passengers interviewed would have paid regular fare, and nearly half (44%) the passengers would have used a SunGo plastic card to pay their fare.
- The average passenger surveyed on the weekend rides transit at least five days a week (69%), has been riding transit more than two years (68%), does not use any additional tools to plan their trip(s) (39%), and believes that adding more weekend service is the most important transit enhancement (33%).
- Passengers' individual demographic responses show that over half of passengers do not possess a valid driver's license (54%), they do not have any disabilities (86%), are between 25-54 years of age (60%), are white (65%), non-Hispanic (64%), and male (68%). They are also employed (57%) and non-students (86%).
- Regarding weekend passengers' households, sixty-six percent of passengers do not have any vehicles available to their household. Seventy-eight percent live in households with three or less people, sixty-five percent have one or less employed household members, and sixty-eight percent live in households that make less than $24,999 annually.

Lessons Learned

Overall, the project performed very well. This survey was conducted during the Covid-19 pandemic which provided a few challenges. Staffing the survey in the beginning showed a high turnout of interested survey staff, yet a high number of staff dropped-off from the project on a weekly basis. Other staffing issues were due to Covid protocols which required that if staff felt ill or showed Covid-type symptoms, they were required to take off from work to get tested and could not return until they showed a negative test or waited 14 days before they returned to work.

As free fares had been implemented during the time the study was conducted, more passengers were observed using transit without a specific trip purpose than what is typically observed when fares are being collected. ETC planned for this prior to administering the

survey and implemented procedures for capturing these types of trips. ETC believes capturing these trips should be done on all future surveys in the region. Survey staff felt unsafe at times due to some of these newer riders and incidents did occur on buses.

Another noteworthy item was that passengers were only allowed to enter and exit the vehicle from the back door. This caused the on-to-off survey to have both collectors at the rear door rather than one at the front and one at the back. ETC managed to effectively handle this problem but recommends that, for future surveys, both doors on the vehicle be accessible for boarding and alighting.

Chapter 1. WEEKDAY OD SURVEY SYSTEM RESULTS

TRIP INFORMATION

WHAT TYPE OF PLACE ARE YOU COMING FROM NOW? (THE STARTING PLACE FOR YOUR ONE-WAY TRIP)

The series below shows the top types of places passengers are coming from. Based on the Survey results, nearly half the passengers (43.5%) interviewed on busses selected "Your HOME" for where their trip originated from and 60.5%of SunLink passengers reported they were coming from home. Another top choice was "Your usual WORKPLACE" with 15.1% of passengers selecting this option. An additional 8.3% of passengers reported they were coming from "Shopping." SunLink has the highest amount of college origin place types with 27.9%.

Table 1-1: What type of place are you COMING FROM NOW? (the starting place for your one-way trip)

What type of place are you COMING FROM NOW? (the starting place for your one-way trip)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Your usual WORKPLACE	15.1%	16.7%	6.9%	4.7%
Your HOME	43.5%	44.4%	60.5%	35.6%
Your Hotel / motel / lodging	0.5%	0.4%	0.0%	0.8%
College / University (students only)	6.0%	3.0%	0.5%	27.9%
School (K-12) (students only)	3.3%	3.6%	1.8%	1.4%
Medical appointment / Doctor visit (non-work)	2.5%	2.8%	2.5%	0.5%
Shopping	8.3%	8.8%	11.1%	4.9%
Dining out	3.3%	2.2%	0.0%	11.7%
Other business related (e.g. meeting, delivery)	1.0%	1.0%	0.0%	1.1%
Social visit (e.g. friends, relatives)	6.0%	6.2%	8.9%	4.5%
Airport (passengers only)	0.1%	0.1%	0.0%	0.0%
Major sporting event	0.0%	0.0%	0.0%	0.0%
Pick up / Drop off someone (e.g. school, daycare)	0.2%	0.3%	0.0%	0.0%
Personal business (e.g. bank, post office)	4.8%	5.0%	3.5%	3.6%
Recreation / Sightseeing	2.7%	2.8%	3.6%	2.0%
Escorting / Accompanying someone	0.3%	0.4%	0.0%	0.0%
No particular destination	2.0%	2.1%	0.0%	1.5%
Other	0.2%	0.2%	0.8%	0.0%

HOW DID YOU GET FROM YOUR ORIGIN?

Series below shows How passengers first access public transit for their one-way. A large majority of all passengers (94.6%) selected that they accessed public transit by "Walk," compared to next highest (1.7%) of passengers who reported "Bike." "Was dropped off by someone" was used by 1.3% of passengers to enter the transit system. Sun Shuttle has the highest number of personal vehicle access at 10.7%.

Table 1-2: How did you GET FROM your origin

How did you GET FROM your origin	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Walk	94.7%	94.6%	84.6%	96.0%
Bike	1.7%	2.0%	0.3%	0.3%
Was dropped off by someone	1.3%	1.4%	6.9%	0.3%
Wheelchair	0.6%	0.7%	0.0%	0.2%
Drove alone and parked	0.5%	0.1%	3.0%	2.5%
Drove or rode with others and parked	0.4%	0.4%	0.8%	0.5%
Cat Tran Shuttle	0.2%	0.2%	3.0%	0.0%
E-scooter (e.g. Spin, Razor)	0.2%	0.2%	1.1%	0.0%
Uber, Lyft, etc.	0.2%	0.2%	0.0%	0.0%
Other	0.1%	0.1%	0.2%	0.0%
Taxi	0.0%	0.0%	0.0%	0.0%
Bike share	0.0%	0.0%	0.0%	0.0%

WHAT TYPE OF PLACE ARE YOU GOING TO NOW? (THE ENDING PLACE FOR YOUR ONE-WAY TRIP)

Series below shows the top types of places to which passengers traveled. Based on the Survey results, 40.4% of passengers selected "Your HOME" for where they were headed on this trip. Another top choice was "Your usual WORKPLACE" with 15.7% of passengers. The third most common choice was "Social Visit" with 9.7% of passengers selecting this option. SunLink has the highest amount of college destination place types at 23.7%.

Table 1-3: What type of place are you GOING TO NOW? (the ending place for your one-way trip)

What type of place are you GOING TO NOW? (the ending place for your one-way trip)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Your usual WORKPLACE	15.7%	16.7%	15.7%	8.4%
Your HOME	40.4%	41.3%	31.1%	34.2%
Your Hotel / motel / lodging	0.1%	0.1%	0.0%	0.2%
College / University (students only)	5.7%	3.3%	2.3%	23.7%
School (K-12) (students only)	2.8%	3.1%	1.8%	0.9%
Medical appointment / Doctor visit (non-work)	2.5%	2.8%	3.5%	0.3%
Shopping	9.3%	9.8%	12.2%	5.1%
Dining out	3.9%	2.7%	0.0%	12.5%
Other business related (e.g. meeting, delivery)	0.9%	0.8%	0.0%	1.0%
Social visit (e.g. friends, relatives)	9.7%	10.2%	12.3%	5.8%
Airport (passengers only)	0.1%	0.1%	0.0%	0.0%
Major sporting event	0.0%	0.0%	0.0%	0.1%
Pick up / Drop off someone (e.g. school, daycare)	0.3%	0.3%	0.0%	0.4%
Personal business (e.g. bank, post office)	5.5%	5.7%	12.9%	3.6%
Recreation / Sightseeing	2.8%	2.6%	5.8%	3.8%
Escorting / Accompanying someone	0.2%	0.2%	0.0%	0.0%
Other	0.1%	0.1%	2.4%	0.1%

HOW WILL YOU GET TO YOUR DESTINATION?

Series below shows how passengers traveled from transit to their destination. The majority of all transit passengers (95.4%) selected "Walk" for their egress mode to their final destination after exiting public transit, compared to the next highest egress mode (1.6%) passengers selected, which was "Bike." An additional 1.1% of passengers reported they left public transit by "Picked up by someone." Sun Shuttle has the highest number of personal vehicle egress at 4.1%.

Table 1-4: How will you GET TO your destination

How will you GET TO your destination	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Walk	95.4%	95.2%	82.6%	98.3%
Bike	1.6%	1.8%	0.3%	0.3%
Be picked up by someone	1.1%	1.2%	3.4%	0.0%
Wheelchair	0.7%	0.8%	0.0%	0.2%
Get in a parked vehicle & drive/ride w/others	0.3%	0.3%	0.0%	0.4%
Get in a parked vehicle & drive alone	0.3%	0.2%	1.8%	0.6%
Other	0.2%	0.1%	7.8%	0.2%
Cat Tran Shuttle	0.1%	0.1%	3.0%	0.0%
Uber, Lyft, etc.	0.1%	0.2%	0.0%	0.0%
E-scooter (e.g. Spin, Razor)	0.1%	0.1%	1.1%	0.0%
Taxi	0.0%	0.0%	0.0%	0.0%

TOTAL NUMBER OF IN-SYSTEM TRANSFERS

The table below shows the total number of system transfers used in the one-way trip by passengers. Most passengers (58.0%) made zero transfers to make their current trip, compared to, 35.8% of passengers that made one transfer during their trip. SunLink has the least amount of transfers with 85.2% of passengers not making a transfer. ***Transfer percentages were based on the unlinked expansion.***

Table 1-5: Total number of in-system transfers

Total number of in-system transfers	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
(0) None	58.0%	55.0%	53.2%	85.2%
(1) One	35.8%	38.3%	40.3%	13.6%
(2) Two	5.7%	6.2%	6.5%	1.2%
(3) Three	0.5%	0.5%	0.0%	0.0%

Fare/Riding Information

IF FARES WERE BEING COLLECTED, WHAT FARE CATEGORY WOULD APPLY TO YOU?

The series below illustrates the fare category used by passenger if fares were being collected. As shown in these visuals, "Regular (Full) Fare" was the most widely selected fare category type as indicated by passengers (54.0%), compared to the next highest, "Economy Low-Income Fare" (23.5%).

Table 1-6: If fares were being collected, what fare category would apply to you?

If fares were being collected, what fare category would apply to you?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Regular (Full) Fare	54.0%	53.9%	47.7%	55.5%
Economy Senior Fare	5.3%	5.5%	6.3%	4.1%
Economy Disabled Fare	3.6%	3.9%	4.6%	0.9%
Economy Low-Income Fare	23.5%	25.2%	34.1%	11.1%
Don't Know	13.6%	11.6%	7.3%	28.4%

IF FARES WERE BEING COLLECTED, HOW WOULD YOU PAY FOR THIS ONE-WAY TRIP?

The series below illustrates the fare payment that would be used by passengers if fares were being collected. As shown in these visuals, "SunGo Card" was the most widely used fare payment type as indicated by passengers (48.0%), compared to the next highest, "Cash Fare" (38.5%).

Table 1-7: If fares were being collected, how would you pay for this one-way trip?

If fares were being collected, how would you pay for this one-way trip?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Cash Fare	38.5%	39.9%	51.6%	24.9%
SunGo Card (plastic)	48.0%	48.8%	40.6%	41.4%
Smart Phone / GOTucson Mobile App	10.0%	7.6%	7.0%	31.6%
Don't Know	3.5%	3.7%	0.7%	2.1%

HOW WOULD YOU HAVE MADE THIS TRIP IF SUN TRAN, SUN LINK, OR SUN SHUTTLE WERE NOT AVAILABLE?

The series below shows what passengers would use for other modes of transportation if Sun Tran, Sun Link, or Sun Shuttle were not available. Twenty-three percent of passengers would use "Friend/Family Member," or Twenty-one percent would use a "Taxi/Uber" if Sun Tran, Sun Link, or Sun Shuttle were not available.

Table 1-8: How would you have made this trip if Sun Tran, Sun Link, or Sun Shuttle were not available?

How would you have made this trip if Sun Tran, Sun Link, or Sun Shuttle were not available?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Walk	20.8%	16.2%	13.5%	54.5%
Other	0.5%	0.6%	1.5%	0.2%
Drive own vehicle	8.7%	8.0%	7.8%	13.9%
Friend/family member	23.7%	26.2%	23.1%	6.2%
Taxi/Uber	21.2%	23.1%	17.5%	8.5%
Would not make trip	10.0%	10.8%	27.0%	2.7%
Sun On Demand	0.6%	0.6%	0.0%	0.3%
Ride bicycle/scooter/skateboard	14.4%	14.6%	9.6%	13.7%

WHAT DID YOU USE TO PLAN THIS TRIP?

The series below shows how passengers plan for their trip. Outside of "Did not do any trip planning," Passengers indicated "Google Transit" was the most widely used method for trip planning (28.1%), compared to "SunTran App" (19.2%).

Table 1-9: What did you use to plan this trip?

What did you use to plan this trip?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Other	0.5%	0.6%	0.0%	0.3%
Paper schedule	11.9%	13.4%	7.4%	1.7%
Called customer service	1.2%	1.2%	8.8%	0.2%
Google Transit	28.1%	29.2%	9.4%	22.1%
Online trip planner (suntran.com)	3.1%	3.4%	2.8%	1.1%
SunTran App	19.2%	20.9%	11.7%	7.7%
Did not do any trip planning	35.9%	31.3%	59.8%	66.9%

HOW OFTEN DO YOU RIDE TRANSIT (SUN TRAN, SUN LINK, SUN SHUTTLE)?

The series below shows the frequency usage reported by the Passenger. Over forty percent of passengers (44.1%) indicated they ride "Everyday" compared to the next highest "5 Days per week" (28.0%). Most Sun Shuttle passengers ride less frequent with 52.6% of Sun Shuttle passengers reporting they ride between 2 and 5 days per week.

Table 1-10: How often do you ride transit (Sun Tran, Sun Link, Sun Shuttle)?

How often do you ride transit (Sun Tran, Sun Link, Sun Shuttle)?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Everyday	44.1%	44.3%	29.3%	43.9%
5 days/week	28.0%	28.2%	27.3%	26.3%
2-4 days/week	21.1%	21.1%	25.3%	20.8%
Once per week	2.6%	2.6%	3.1%	2.4%
2-3 times/month	2.3%	2.1%	12.0%	2.6%
Once per month	0.4%	0.4%	0.0%	0.3%
Less than once per month	1.5%	1.2%	3.1%	3.8%

HOW LONG HAVE YOU BEEN RIDING PUBLIC TRANSIT IN THE TUCSON AREA?

The series below illustrates the length of service usage reported by the respondent. As shown in this visual, "2 to 5 years" was the most common length of used services reported by passengers (25.6%) compared to the next two highest lengths "1 to 2 years" (20.8%) and "More than 10 years" (19.9%).

Table 1-11: How long have you been riding public transit in the Tucson area?

How long have you been riding public transit in the Tucson area?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
First time riding	1.3%	1.1%	0.3%	2.9%
Less than 1 year	17.2%	14.0%	17.7%	39.9%
1-2 years	20.8%	19.3%	18.7%	31.8%
2-5 years	25.6%	27.4%	27.0%	12.5%
5-10 years	15.2%	16.5%	15.2%	6.2%
More than 10 years	19.9%	21.7%	21.0%	6.6%

WHAT IS THE SERVICE ENHANCEMENT THAT IS OF MOST IMPORTANCE TO YOU? (SELECT ONLY ONE)

The series below illustrates what passengers indicated as the most important service enhancement. Overall, over a quarter of passengers (27.7%) viewed "More weekend service" as the most important service enhancement compared to the next highest, "More frequent service" (21.9%).

Table 1-12: What is the service enhancement that is of most importance to you? (select only one)

What is the service enhancement that is of most importance to you? (select only one)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Other	12.3%	12.1%	19.2%	13.4%
More frequent service	21.9%	20.9%	14.9%	29.6%
Earlier operating hours	6.4%	6.8%	0.2%	4.1%
Later operating hours	18.9%	18.4%	19.9%	22.3%
More weekend service	27.7%	29.5%	30.3%	14.3%
Shorter travel time	6.8%	7.1%	5.2%	4.7%
Different destinations	6.0%	5.2%	10.3%	11.5%

Rider Information

HOW MANY VEHICLES (CARS, TRUCKS, OR MOTORCYCLES) ARE AVAILABLE TO YOUR HOUSEHOLD?

The series below illustrates the number of household vehicles for passengers' household. Half (50.0%) the passengers indicated they are without a working vehicle in their household, compared to 30.1% of passengers with one working vehicle in their household, and 19.9% of passengers with two or more working vehicles in their household. Of those passengers who indicated they have a vehicle in their household, the majority (69.3%) indicated their vehicle was not available for this one-way trip.

Table 1-13: How many vehicles (cars, trucks, or motorcycles) are available to your household?

How many vehicles (cars, trucks, or motorcycles) are available to your household?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
None (0)	50.0%	50.4%	52.3%	47.5%
One (1)	30.1%	29.6%	29.5%	34.0%
Two (2)	15.3%	15.7%	14.6%	12.4%
Three (3)	3.0%	2.8%	3.7%	4.4%
Four (4)	1.0%	0.9%	0.0%	1.6%
Five (5)	0.4%	0.4%	0.0%	0.2%
Six (6)	0.1%	0.1%	0.0%	0.0%
Seven (7)	0.0%	0.1%	0.0%	0.0%
Eight (8)	0.0%	0.0%	0.0%	0.0%
Ten or more (10+)	0.0%	0.0%	0.0%	0.0%

COULD YOU HAVE USED ONE OF THESE VEHICLES TO COMPLETE THIS TRIP?

Of those that responded as having one or more household vehicles, nearly three-quarters (69.3%) of passengers stated that they could not use a household vehicle to make their current trip.

Table 1-14: Could you have used one of these vehicles to complete this trip?

Could you have used one of these vehicles to complete this trip?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
(1) Yes	30.7%	27.1%	26.0%	55.5%
(2) No	69.3%	72.9%	74.0%	44.5%

INCLUDING YOU, HOW MANY PEOPLE LIVE IN YOUR HOUSEHOLD?

The total number of household members for passengers' households is shown below. Half of passengers (50.4%) are in a one or two-member households, compared to 37.7% of passengers with three or four members in the household.

Table 1-15: Including YOU, how many people live in your household?

Including YOU, how many people live in your household?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
One (1)	27.1%	27.6%	24.5%	24.2%
Two (2)	23.3%	22.5%	14.4%	29.6%
Three (3)	20.8%	21.1%	18.5%	18.6%
Four (4)	16.9%	16.3%	14.8%	21.1%
Five (5)	6.5%	6.9%	12.8%	2.9%
Six (6)	3.3%	3.5%	6.2%	1.9%
Seven (7)	0.7%	0.8%	1.7%	0.3%
Eight (8)	0.5%	0.6%	2.8%	0.0%
Nine (9)	0.4%	0.4%	3.8%	0.2%
Ten or More (10+)	0.6%	0.5%	0.5%	1.2%

INCLUDING YOU, HOW MANY PEOPLE (OVER AGE 15) IN YOUR HOUSEHOLD ARE EMPLOYED FULL OR PART-TIME?

The total number of employed household members for passengers' households is shown below. Nearly two-thirds of passengers (65.3%) are in a household with one or two-members employed, compared to 19.6% of passengers with zero employed members in the household, and 14.1% of passengers with three or four employed members in the household.

Table 1-16: Including YOU, how many people (over age 15) in your household are employed full or part-time?

Including YOU, how many people (over age 15) in your household are employed full or part-time?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
None (0)	19.6%	18.0%	21.9%	30.8%
One (1)	37.0%	38.6%	28.9%	25.9%
Two (2)	28.3%	28.4%	26.6%	27.5%
Three (3)	11.0%	11.1%	6.5%	10.3%
Four (4)	3.1%	2.8%	12.6%	4.4%
Five (5)	0.6%	0.6%	2.3%	0.2%
Six (6)	0.2%	0.2%	0.7%	0.1%
Seven (7)	0.1%	0.1%	0.5%	0.2%
Eight (8)	0.1%	0.1%	0.0%	0.0%
Nine (9)	0.0%	0.0%	0.0%	0.0%
Ten or More (10+)	0.1%	0.1%	0.0%	0.6%

WHAT IS YOUR EMPLOYMENT STATUS? (CHECK THE ONE RESPONSE THAT BEST DESCRIBES YOU)

The series below shows the employment status of passengers. Most passengers (59.8%) reported "Employed" (either full- or part-time) for employment status. Thirty-five percent of SunLink passengers reported that they are not employed nor seeking work.

Table 1-17: What is your employment status? (Check the one response that BEST describes you)

What is your employment status? (Check the one response that BEST describes you)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Employed full-time (at least 35 hours per week)	38.7%	41.3%	31.9%	20.5%
Employed part-time (less than 35 hours per week)	21.1%	19.5%	18.5%	32.4%
Not currently employed, but seeking work	12.5%	13.5%	7.7%	6.2%
Not currently employed, and not seeking work	19.0%	16.6%	28.3%	35.6%
Retired	7.9%	8.3%	10.6%	5.3%
Homemaker	0.8%	0.9%	3.0%	0.1%

WHAT IS YOUR STUDENT STATUS? (CHECK THE ONE RESPONSE THAT BEST DESCRIBES YOU)

The series below shows the student status of passengers. Most passengers (69.9%) reported that they were "Not a student" for student status, compared to 20.9% of passengers that reported either "Full/Part-time College/University" as their student status. SunLink has the most college students out of all three systems (74.7%).

Table 1-18: What is your student status? (check the one response that BEST describes you)

What is your student status? (check the one response that BEST describes you)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Not a student	69.9%	76.4%	84.3%	22.6%
Yes - Full-time College / University	15.2%	7.6%	5.1%	70.6%
Yes - Part-time College / University	5.7%	6.0%	2.2%	4.1%
Yes - Vocational / Technical / Trade School	0.8%	0.9%	0.0%	0.1%
Yes - K-12th grade	8.1%	8.9%	8.4%	2.5%
Yes - Other	0.2%	0.2%	0.0%	0.0%

DO YOU HAVE A VALID DRIVER'S LICENSE?

Th series below shows if the transit passenger had a valid driver's license. Over half the passengers (51.6%) indicated they did not have a valid driver's license.

Table 1-19: Do you have a valid driver's license?

Do you have a valid driver's license?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
(2) No	51.6%	55.1%	61.6%	25.9%
(1) Yes	48.4%	44.9%	38.4%	74.1%

DO YOU HAVE A DISABILITY THAT LIMITS YOUR MOBILITY?

The series below shows if the transit passenger had a disability that limits their mobility. Most passengers (90.0%) indicated they did not have a disability that limits their mobility, compared to (9.1%) who indicated they had a disability that limits their mobility.

Table 1-20: Do you have a disability that limits your mobility?

Do you have a disability that limits your mobility?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Prefer Not to say	0.9%	1.0%	3.0%	0.4%
(1) Yes	9.1%	10.0%	13.8%	2.5%
(2) No	90.0%	89.0%	83.2%	97.2%

WHAT IS YOUR AGE?

The series below illustrates the age of passengers. Nearly half (48.7%) the passengers indicated their age is between 18-34, compared to 29.3% of passengers indicated their age is between 35-54.

Table 1-21: What is your age?

What is your age?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
15 and under	2.5%	2.8%	5.3%	0.6%
16 - 17	4.8%	5.3%	3.1%	1.7%
18 - 24	25.6%	20.1%	7.9%	66.9%
25 - 34	23.1%	24.5%	28.1%	13.0%
35 - 44	17.3%	19.1%	16.5%	4.8%
45 - 54	12.0%	12.9%	19.6%	4.4%
55 - 64	8.7%	9.4%	11.1%	3.5%
65 and older	5.9%	6.0%	8.4%	5.1%

WHAT IS YOUR RACE / ETHNICITY? (CHECK ALL THAT APPLY)...

The series below shows the race/ethnicity of passengers. Passengers were able to select 'American Indian/Alaskan Native,' 'Asian,' 'Black/African American,' 'White/Caucasian,' and/or 'Native Hawaiian/Pacific Islander.' The totals add up to over 100% because respondents were encouraged to check all answers that applied. Over sixty percent of passengers (62.9%) indicated they were "White/Caucasian," compared to the next highest (15.0%) of passengers who reported "Black / African American."

Passengers were then also asked if they were Hispanic, Latino, or Spanish origin. Over one-third of passengers reported "Yes," they were of Hispanic, Latino, or Spanish origin (37.0%).

Table 1-22: What is your Race / Ethnicity? (check all that apply)...

What is your Race / Ethnicity? (check all that apply)...	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
American Indian / Alaska Native	12.5%	13.7%	39.3%	2.6%
Asian	4.5%	4.1%	1.5%	8.2%
Black / African American	15.0%	15.5%	4.1%	12.5%
Native Hawaiian / Pacific Islander	0.8%	0.8%	0.4%	0.9%
White / Caucasian	62.9%	61.5%	47.5%	74.2%
Prefer not to answer	4.2%	4.5%	7.2%	1.6%

Table 1-23: Are you of Hispanic, Latino, or Spanish origin?

Are you of Hispanic, Latino, or Spanish origin? (includes: Mexican/Mexican American, Puerto Rican, Cuban/Cuban	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
(1) Yes	37.0%	38.9%	37.8%	23.5%
(2) No	63.0%	61.1%	62.2%	76.5%

DO YOU SPEAK A LANGUAGE OTHER THAN ENGLISH AT HOME?

Other languages spoken at the passengers' homes is displayed in the series below. Over a quarter (27.2%) of passengers indicated they spoke a language other than English at home. Of those passengers, nearly ninety percent (88.9%) indicated they spoke English "Very well" as shown in the second chart in the series. The third series shows the languages spoken at home.

Table 1-24: Do you speak a language other than English at home?

Do you speak a language other than English at home?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
(1) Yes	27.2%	27.7%	28.9%	23.6%
(2) No	72.8%	72.3%	71.1%	76.4%

HOW WELL DO YOU SPEAK ENGLISH?

Table 1-25: If yes, How well do you speak English?

How well do you speak English?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Very well	88.9%	87.9%	100.0%	96.3%
Well	6.5%	6.9%	0.0%	3.4%
Less than well	4.0%	4.5%	0.0%	0.3%
Not at all	0.6%	0.7%	0.0%	0.0%

Table 1-26A: Other Languages Spoke at Home

Language respondent speaks at home other than English	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Spanish	79.4%	83.1%	76.7%	48.7%
Arabic, Standard	2.2%	1.4%	1.6%	8.7%
Other	1.7%	1.7%	21.0%	0.1%
French	1.4%	1.1%	0.0%	4.0%
Hindi	1.1%	0.1%	0.0%	10.2%
Russian	1.1%	1.0%	0.8%	2.0%
German	1.0%	1.0%	0.0%	1.5%
Japanese	1.0%	0.9%	0.0%	1.8%
American Sign Language (ASL)	0.9%	1.0%	0.0%	0.2%
Swahili	0.9%	1.0%	0.0%	0.0%
Korean	0.8%	0.8%	0.0%	1.5%
Old Persian	0.8%	0.8%	0.0%	1.1%
Italian	0.6%	0.3%	0.0%	3.0%
Vietnamese	0.6%	0.5%	0.0%	1.4%
Chinese, Mandarin	0.6%	0.3%	0.0%	3.4%
Somali	0.5%	0.5%	0.0%	0.9%
Chinese	0.5%	0.3%	0.0%	2.0%
Navajo	0.4%	0.5%	0.0%	0.0%
Hebrew	0.3%	0.3%	0.0%	0.8%
Filipino	0.3%	0.4%	0.0%	0.0%
Judeo-Malayalam	0.3%	0.4%	0.0%	0.0%
Chinese, Cantonese	0.2%	0.2%	0.0%	0.8%
Portuguese	0.2%	0.1%	0.0%	1.1%
Nepali	0.2%	0.0%	0.0%	2.0%
Portuguese creole of Tugo	0.2%	0.2%	0.0%	0.0%
Turkish	0.2%	0.1%	0.0%	0.8%
Afrikaans	0.2%	0.2%	0.0%	0.1%
Akan	0.2%	0.1%	0.0%	0.5%
Haitian Creole French	0.1%	0.1%	0.0%	0.0%
Noric	0.1%	0.1%	0.0%	0.0%
Dari	0.1%	0.1%	0.0%	0.0%
Finnish	0.1%	0.1%	0.0%	0.0%
Hungarian	0.1%	0.0%	0.0%	1.1%
Jamaican	0.1%	0.1%	0.0%	0.0%
Ojibwa	0.1%	0.1%	0.0%	0.0%
Louisiana Creole French	0.1%	0.1%	0.0%	0.0%
Kannada	0.1%	0.0%	0.0%	0.7%
Seselwa Creole French	0.1%	0.1%	0.0%	0.0%
Old English	0.1%	0.1%	0.0%	0.0%
Ukrainian	0.1%	0.0%	0.0%	0.6%
Thai	0.1%	0.0%	0.0%	0.6%
Farsi, Eastern	0.1%	0.1%	0.0%	0.0%
Dutch	0.1%	0.1%	0.0%	0.0%
Norwegian	0.0%	0.1%	0.0%	0.0%
Yakut	0.0%	0.1%	0.0%	0.0%
Classical Greek	0.0%	0.1%	0.0%	0.0%
Indonesian	0.0%	0.0%	0.0%	0.0%
Nahuatl	0.0%	0.0%	0.0%	0.0%
Bengali	0.0%	0.0%	0.0%	0.0%
Urdu	0.0%	0.0%	0.0%	0.0%
Kreyol	0.0%	0.0%	0.0%	0.0%
Amharic	0.0%	0.0%	0.0%	0.0%
Ndebele	0.0%	0.0%	0.0%	0.3%
Tagalog	0.0%	0.0%	0.0%	0.0%
Dutch Creole	0.0%	0.0%	0.0%	0.0%
Swedish	0.0%	0.0%	0.0%	0.0%
Telugu	0.0%	0.0%	0.0%	0.1%
Malay	0.0%	0.0%	0.0%	0.1%
Czech	0.0%	0.0%	0.0%	0.0%
Early Contemporary Swedish	0.0%	0.0%	0.0%	0.0%
Aragonese	0.0%	0.0%	0.0%	0.0%
Danish	0.0%	0.0%	0.0%	0.0%

WHAT IS YOUR GENDER?

The gender of passengers is presented in series below. Totals add up to more than 100% because respondents were able to check all answers that applied. Over half of passengers (62.3%) indicated they were male, compared to (36.0%) who indicated they were female.

Table 1-27: What is your gender?...

What is your gender?...	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Male	62.3%	64.1%	65.1%	49.7%
Female	36.0%	34.2%	31.8%	48.8%
Non-binary / third gender	1.0%	1.0%	0.0%	0.7%
Transgender	0.3%	0.3%	0.0%	0.6%
Other / Prefer to self-describe	0.2%	0.2%	0.0%	0.1%
Prefer not to say	0.2%	0.2%	3.1%	0.1%

WHICH OF THE FOLLOWING BEST DESCRIBES YOUR TOTAL ANNUAL HOUSEHOLD INCOME IN 2021 BEFORE TAXES?

The series below shows the Total Annual Household Income for passengers' households. Over half (58.2%) the passengers indicated their household income is below "$25,000", compared to 29.37% of passengers with household income between "$25,000 - $50,000", and 12.5% of passengers with household income of "$50,000 or more". Fifteen Percent (15.2%) refused or did not answer the question.

Table 1-28: Which of the following BEST describes your TOTAL ANNUAL HOUSEHOLD INCOME in 2021 before taxes?

Which of the following BEST describes your TOTAL ANNUAL HOUSEHOLD INCOME in 2021 before taxes?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Less than $10,000	24.7%	23.7%	36.7%	30.7%
$10,000 - $14,999	13.2%	13.2%	20.0%	12.5%
$15,000 - $24,999	20.3%	21.0%	19.2%	15.5%
$25,000 - $34,999	17.6%	18.6%	5.4%	11.2%
$35,000 - $49,999	11.7%	12.3%	9.1%	7.6%
$50,000 - $74,999	7.8%	7.8%	7.4%	8.2%
$75,000 - $99,999	2.8%	2.3%	0.3%	6.5%
$100,000 or more	1.9%	1.1%	1.9%	7.8%

Chapter 2. WEEKEND OD SURVEY SYSTEM RESULTS

This section summarizes the weekend survey results by transit system.

TRIP INFORMATION

WHAT TYPE OF PLACE ARE YOU COMING FROM NOW? (THE STARTING PLACE FOR YOUR ONE-WAY TRIP)

The series below shows the top types of places passengers are coming from. Based on the Survey results, more than half of weekend passengers (53.3%) selected "Your HOME" for where their trip originated from. Another top choice was "Shopping" with 11.1% of weekend passengers. An additional 10.0% of weekend passengers reported they were coming from "Your usual WORKPLACE."

Table 2-1: What type of place are you COMING FROM NOW? (the starting place for your one-way trip)

What type of place are you COMING FROM NOW? (the starting place for your one-way trip)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Your usual WORKPLACE	10.0%	10.3%	0.0%	5.2%
Your HOME	53.3%	52.8%	83.5%	61.3%
Your Hotel / motel / lodging	0.7%	0.4%	3.3%	5.2%
College / University (students only)	0.2%	0.1%	0.0%	2.6%
Medical appointment / Doctor visit (non-work)	1.5%	1.5%	0.0%	0.0%
Shopping	11.1%	11.4%	13.2%	6.1%
Dining out	2.6%	2.7%	0.0%	1.3%
Other business related (e.g. meeting, delivery)	2.1%	2.2%	0.0%	0.0%
Social visit (e.g. friends, relatives)	9.0%	9.2%	0.0%	6.5%
Airport (passengers only)	0.2%	0.2%	0.0%	0.0%
Pick up / Drop off someone (e.g. school, daycare)	0.1%	0.1%	0.0%	0.0%
Personal business (e.g. bank, post office)	2.9%	2.8%	0.0%	3.9%
Recreation / Sightseeing	4.5%	4.3%	0.0%	7.8%
Escorting / Accompanying someone	0.5%	0.6%	0.0%	0.0%
Other	1.4%	1.5%	0.0%	0.0%

HOW DID YOU GET FROM YOUR ORIGIN?

The series below shows How weekend passengers first access public transit for their one-way. A large majority of all weekend passengers (92.2%) selected that they accessed public transit by "Walk," compared to next highest category (2.5%) of weekend passengers who reported "Was dropped off by someone." An additional 2.3% of weekend passengers used "Bike" to access public transit.

Table 2-2: How did you GET FROM your origin

How did you GET FROM your origin	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Walk	92.2%	92.7%	85.0%	84.3%
Wheelchair	0.9%	0.9%	0.0%	0.0%
Bike	2.3%	2.3%	0.0%	2.6%
Was dropped off by someone	2.5%	2.5%	0.0%	2.6%
Drove alone and parked	0.7%	0.4%	15.0%	5.2%
Drove or rode with others and parked	0.7%	0.4%	0.0%	5.2%
Uber, Lyft, etc.	0.1%	0.1%	0.0%	0.0%
E-scooter (e.g. Spin, Razor)	0.4%	0.4%	0.0%	0.0%
Other	0.2%	0.3%	0.0%	0.0%

WHAT TYPE OF PLACE ARE YOU GOING TO NOW? (THE ENDING PLACE FOR YOUR ONE-WAY TRIP)

The series below shows the top types of places weekend passengers are going to. Based on the Survey results, 26.8% of weekend passengers selected "Your HOME" for where they were headed on this trip. Another top choice was "Shopping" with 18.1% of weekend passengers. The third top choice was "Your usual WORKPLACE" with 15.3% of weekend passengers.

Table 6-3: What type of place are you GOING TO NOW? (the ending place for your one-way trip)

What type of place are you GOING TO NOW? (the ending place for your one-way trip)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Your usual WORKPLACE	15.3%	15.8%	18.3%	5.2%
Your HOME	26.8%	27.4%	13.2%	17.8%
College / University (students only)	0.9%	0.7%	0.0%	5.2%
School (K-12) (students only)	0.2%	0.2%	0.0%	0.0%
Medical appointment / Doctor visit (non-work)	2.5%	2.6%	0.0%	1.3%
Shopping	18.1%	18.6%	0.0%	10.4%
Dining out	2.3%	2.3%	0.0%	2.6%
Other business related (e.g. meeting, delivery)	2.7%	2.5%	0.0%	5.2%
Social visit (e.g. friends, relatives)	15.2%	14.5%	2.2%	28.7%
Airport (passengers only)	0.1%	0.1%	0.0%	0.0%
Major sporting event	0.0%	0.0%	0.0%	0.0%
Pick up / Drop off someone (e.g. school, daycare)	0.2%	0.2%	0.0%	0.0%
Personal business (e.g. bank, post office)	6.6%	6.6%	0.0%	7.8%
Recreation / Sightseeing	4.5%	3.7%	66.3%	15.7%
No particular destination	3.7%	3.9%	0.0%	0.0%
Other	0.8%	0.8%	0.0%	0.0%

HOW WILL YOU GET TO YOUR DESTINATION?

The series below shows how passengers traveled from transit to their destination. The majority of weekend transit passengers (94.5%) selected "Walk" for their egress mode type to their final destination after exiting public transit, compared to the next highest group (2.1%) of weekend passengers that selected either "Bike" or "Be picked up by someone" (1.5%).

Table 6-4: How will you GET TO your destination

How will you GET TO your destination	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Walk	94.5%	94.6%	100.0%	92.2%
Wheelchair	0.9%	0.9%	0.0%	0.0%
Bike	2.1%	2.0%	0.0%	2.6%
Be picked up by someone	1.5%	1.6%	0.0%	0.0%
E-scooter (e.g. Spin, Razor)	0.3%	0.3%	0.0%	0.0%
Other	0.2%	0.3%	0.0%	0.0%
Get in a parked vehicle & drive alone	0.3%	0.2%	0.0%	2.6%
Get in a parked vehicle & drive/ride w/others	0.2%	0.0%	0.0%	2.6%

TOTAL NUMBER OF IN-SYSTEM TRANSFERS

The series below shows the total number of system transfers used in the one-way trip by weekend passengers. Most weekend passengers (47.3%) used zero system transfers to make their current trip, compared to, 41.7% of weekend passengers that used one system transfer during their trip. ***Transfer percentages were based on the unlinked expansion.***

Table 6-5: Total number of in-system transfers

Total number of in-system transfers	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
(0) None	47.3%	45.9%	16.2%	83.3%
(1) One	41.7%	42.7%	80.0%	14.3%
(2) Two	9.9%	10.3%	3.8%	2.4%
(3) Three	1.0%	1.0%	0.0%	0.0%
(4) Four	0.1%	0.1%	0.0%	0.0%

FARE/RIDING INFORMATION

IF FARES WERE BEING COLLECTED, WHAT FARE CATEGORY WOULD APPLY TO YOU?

The series below illustrates the fare category that would be used by weekend passengers if fares were being collected. As shown in these visuals, "Regular (Full) Fare" was the most widely used fare category type as indicated by weekend passengers (47.9%), compared to the next highest, "Economy Low-Income Fare" (25.3%).

Table 6-6: If fares were being collected, what fare category would apply to you?

If fares were being collected, what fare category would apply to you?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Regular (Full) Fare	47.9%	48.8%	94.5%	28.7%
Economy Senior Fare	9.8%	9.7%	0.0%	12.6%
Economy Disabled Fare	4.7%	5.0%	0.0%	0.0%
Economy Low-Income Fare	25.3%	25.6%	5.5%	20.9%
Don't Know	12.2%	10.8%	0.0%	37.8%

IF FARES WERE BEING COLLECTED, HOW WOULD YOU PAY FOR THIS ONE-WAY TRIP?

The series below illustrates the fare payment that would be used by weekend passengers if fares were being collected. As shown in these visuals, "SunGo Card" was the most widely used fare payment type as indicated by weekend passengers (43.5%), compared to the next highest, "Cash Fare" (40.0%).

Table 6-7: If fares were being collected, how would you pay for this one-way trip?

If fares were being collected, how would you pay for this one-way trip?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Cash Fare	40.0%	40.5%	87.9%	27.4%
SunGo Card (plastic)	43.5%	44.4%	12.1%	29.6%
Smart Phone / GOTucson Mobile App	2.5%	2.4%	0.0%	5.2%
Don't Know	14.0%	12.8%	0.0%	37.8%

HOW WOULD YOU HAVE MADE THIS TRIP IF SUN TRAN, SUN LINK, OR SUN SHUTTLE WERE NOT AVAILABLE?

The series below shows what passengers would use for other modes of transportation if Sun Tran, Sun Link, or Sun Shuttle were not available. Twenty-four percent of weekend passengers would "Walk," and Twenty-one percent would use a "Taxi/Uber" if Sun Tran, Sun Link, or Sun Shuttle were not available.

Table 6-8: How would you have made this trip if Sun Tran, Sun Link, or Sun Shuttle were not available?

How would you have made this trip if Sun Tran, Sun Link, or Sun Shuttle were not available?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Walk	24.1%	23.3%	16.5%	39.1%
Other	1.5%	1.6%	0.0%	0.0%
Drive own vehicle	5.4%	3.9%	0.0%	33.9%
Ride bicycle	11.9%	11.9%	0.0%	11.7%
Friend/family member	16.0%	17.0%	0.0%	0.0%
Taxi/Uber	21.3%	22.3%	0.0%	5.2%
Would not make trip	18.9%	19.2%	83.5%	10.0%
Sun On Demand	0.9%	0.9%	0.0%	0.0%

WHAT DID YOU USE TO PLAN THIS TRIP?

The series below shows how weekend passengers plan for their trip. Outside of "Did not do any trip planning," passengers indicated "Google Transit" was the most widely used method for trip planning (24.5%), compared to "SunTran App" (16.8%) and "Paper Schedule" (15.6%).

Table 6-9: What did you use to plan this trip?

What did you use to plan this trip?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Other	0.8%	0.8%	0.0%	0.0%
Paper schedule	15.6%	16.3%	0.0%	4.8%
Called customer service	1.0%	0.9%	0.0%	2.6%
Google Transit	24.5%	23.6%	3.3%	41.7%
Online trip planner (suntran.com)	2.2%	2.1%	6.6%	5.2%
SunTran App	16.8%	17.2%	6.6%	9.1%
Did not do any trip planning	39.0%	39.0%	83.5%	36.5%

HOW OFTEN DO YOU RIDE TRANSIT (SUN TRAN, SUN LINK, SUN SHUTTLE)?

The series below shows the weekend passenger frequency usage. Over forty percent of weekend passengers (43.8%) indicated they ride "Everyday" compared to the next highest categories, "5 Days per week" (24.7%) and "2-4 days per week" (22.2%).

Table 6-10: How often do you ride transit (Sun Tran, Sun Link, Sun Shuttle)?

How often do you ride transit (Sun Tran, Sun Link, Sun Shuttle)?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Everyday	43.8%	44.1%	68.5%	37.4%
5 days/week	24.7%	25.6%	3.3%	10.4%
2-4 days/week	22.2%	22.6%	15.0%	15.7%
Once per week	3.3%	3.2%	6.6%	5.2%
2-3 times/month	2.6%	2.6%	6.6%	2.6%
Once per month	0.4%	0.4%	0.0%	0.0%
Less than once per month	2.9%	1.5%	0.0%	28.7%

HOW LONG HAVE YOU BEEN RIDING PUBLIC TRANSIT IN THE TUCSON AREA?

The series below illustrates the length of service usage reported by the respondent. As shown in this visual, "More than 10 years" was the most common length of used services by weekend passengers (29.7%) compared to the next highest, "2 to 5 years" (24.1%).

Table 6-11: How long have you been riding public transit in the Tucson area?

How long have you been riding public transit in the Tucson area?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
First time riding	1.8%	1.2%	0.0%	13.0%
Less than 1 year	15.6%	15.1%	0.0%	27.4%
1-2 years	15.0%	14.5%	0.0%	24.8%
2-5 years	24.1%	24.6%	24.9%	15.7%
5-10 years	13.7%	13.9%	68.5%	7.8%
More than 10 years	29.7%	30.8%	6.6%	11.3%

WHAT IS THE SERVICE ENHANCEMENT THAT IS OF MOST IMPORTANCE TO YOU? (SELECT ONLY ONE)

The series below illustrates what weekend passengers indicated as the most important service enhancement. Overall, nearly one-third of passengers (32.5%) viewed "More weekend service" as the most important service enhancement compared to the next highest "More frequent service" (20.4%).

Table 6-12: What is the service enhancement that is of most importance to you? (select only one)

What is the service enhancement that is of most importance to you? (select only one)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Other	15.7%	14.4%	2.2%	40.4%
More frequent service	20.4%	20.6%	21.6%	17.0%
Earlier operating hours	4.9%	5.2%	0.0%	0.0%
Later operating hours	16.5%	17.0%	3.3%	8.7%
More weekend service	32.5%	33.2%	72.9%	18.3%
Shorter travel time	5.6%	6.0%	0.0%	0.0%
Different destinations	4.3%	3.7%	0.0%	15.7%

Rider Information

HOW MANY VEHICLES (CARS, TRUCKS, OR MOTORCYCLES) ARE AVAILABLE TO YOUR HOUSEHOLD?

The series below illustrates the number of household vehicles for weekend passengers' households. Two-thirds (66.0%) of passengers indicated they are without a working vehicle in their household, compared to 23.4% of passengers with one working vehicle in their household, and 10.6 percent of passengers with two or more working vehicles in their household. Of those passengers who indicated they have a vehicle in their household, the majority (59.7%) indicated their vehicle was not available for this one-way trip.

Table 6-13: How many vehicles (cars, trucks, or motorcycles) are available to your household?

How many vehicles (cars, trucks, or motorcycles) are available to your household?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
None (0)	66.0%	67.4%	71.8%	40.4%
One (1)	23.4%	22.3%	6.6%	45.2%
Two (2)	7.3%	7.1%	15.0%	10.4%
Three (3)	2.0%	1.9%	6.6%	3.9%
Four (4)	1.0%	1.1%	0.0%	0.0%
Five (5)	0.3%	0.3%	0.0%	0.0%

COULD YOU HAVE USED ONE OF THESE VEHICLES TO COMPLETE THIS TRIP?

Out of the passengers that responded as having one or more household vehicles, 59.7% of passengers stated that they could not use a household vehicle to make their current trip.

Table 6-14: Could you have used one of these vehicles to complete this trip?

Could you have used one of these vehicles to complete this trip?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
(1) Yes	40.3%	37.4%	46.9%	70.1%
(2) No	59.7%	62.6%	53.1%	29.9%

INCLUDING YOU, HOW MANY PEOPLE LIVE IN YOUR HOUSEHOLD?

The total number of household members for weekend passengers' households is shown below. Over half the passengers (62.0%) reported being in one or two-member households, compared to 25.5% of passengers with three or four members in the household.

Table 6-15: Including YOU, how many people live in your household?

Including YOU, how many people live in your household?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
One (1)	40.9%	40.8%	2.2%	44.3%
Two (2)	21.1%	20.9%	6.6%	27.4%
Three (3)	16.1%	15.9%	87.9%	15.7%
Four (4)	9.4%	9.8%	3.3%	2.6%
Five (5)	5.8%	5.9%	0.0%	3.9%
Six (6)	2.5%	2.6%	0.0%	0.0%
Seven (7)	1.2%	1.3%	0.0%	0.0%
Eight (8)	1.0%	1.1%	0.0%	0.0%
Nine (9)	0.4%	0.4%	0.0%	0.9%
Ten or More (10+)	1.5%	1.3%	0.0%	5.2%

INCLUDING YOU, HOW MANY PEOPLE (OVER AGE 15) IN YOUR HOUSEHOLD ARE EMPLOYED FULL OR PART-TIME?

The total number of employed household members for weekend passengers' households is shown below. Nearly two-thirds of passengers (64.8%) are in a household with one or two-members employed, compared to 30.2% of passengers with zero employed members in the household, and 11.1% of passengers with three or four employed members in the household.

Table 6-16: Including YOU, how many people (over age 15) in your household are employed full or part-time?

Including YOU, how many people (over age 15) in your household are employed full or part-time?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
None (0)	30.2%	29.9%	2.2%	37.4%
One (1)	34.6%	35.2%	9.9%	24.8%
Two (2)	22.1%	21.7%	66.3%	27.4%
Three (3)	8.5%	8.7%	21.6%	5.2%
Four (4)	2.6%	2.8%	0.0%	0.0%
Five (5)	0.6%	0.6%	0.0%	0.0%
Six (6)	0.3%	0.3%	0.0%	0.0%
Seven (7)	0.1%	0.1%	0.0%	0.0%
Eight (8)	0.3%	0.3%	0.0%	0.0%
Ten or More (10+)	0.8%	0.5%	0.0%	5.2%

WHAT IS YOUR EMPLOYMENT STATUS? (CHECK THE ONE RESPONSE THAT BEST DESCRIBES YOU)

The series below shows the employment status of weekend passengers. Most passengers (57.3%) reported "Employed" (either full- or part-time) for employment status.

Table 6-17: What is your employment status? (Check the one response that BEST describes you)

What is your employment status? (Check the one response that BEST describes you)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Employed full-time (at least 35 hours per week)	39.1%	40.1%	6.6%	22.2%
Employed part-time (less than 35 hours per week)	18.2%	17.1%	24.9%	37.8%
Not currently employed, but seeking work	13.5%	13.6%	66.3%	10.4%
Not currently employed, and not seeking work	16.7%	17.3%	0.0%	7.4%
Retired	11.8%	11.3%	2.2%	22.2%
Homemaker	0.6%	0.7%	0.0%	0.0%

WHAT IS YOUR STUDENT STATUS? (CHECK THE ONE RESPONSE THAT BEST DESCRIBES YOU)

The series below shows the student status of weekend passengers. Most passengers (86.4%) reported "Not a student" for student status, compared to 8.4% of passengers that reported "Full/Part-time College/University" as their student status.

Table 6-18: What is your student status? (check the one response that BEST describes you)

What is your student status? (check the one response that BEST describes you)	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Not a student	86.4%	87.7%	100.0%	60.9%
Yes - Full-time College / University	6.8%	5.1%	0.0%	39.1%
Yes - Part-time College / University	1.6%	1.7%	0.0%	0.0%
Yes - Vocational / Technical / Trade School	0.6%	0.6%	0.0%	0.0%
Yes - K-12th grade	4.4%	4.7%	0.0%	0.0%
Yes - Other	0.1%	0.1%	0.0%	0.0%

DO YOU HAVE A VALID DRIVER'S LICENSE?

The series below shows if the transit passenger has a valid driver's license. Over half the passengers (54.2%) indicated they did not have a valid driver's license, compared to (45.8%) who indicated they had a valid driver's license.

Table 6-19: Do you have a valid driver's license?

Do you have a valid driver's license?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
(1) Yes	45.8%	43.6%	24.9%	87.0%
(2) No	54.2%	56.4%	75.1%	13.0%

DO YOU HAVE A DISABILITY THAT LIMITS YOUR MOBILITY?

The series below shows if the transit passenger has a disability that limits their mobility. Most passengers (86.0%) indicated they did not have a disability that limits their mobility, compared to 13.9% who indicated they had a disability that limits their mobility.

Table 6-20: Do you have a disability that limits your mobility?

Do you have a disability that limits your mobility?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Prefer not to say	0.1%	0.1%	0.0%	0.0%
(1) Yes	13.9%	14.6%	0.0%	1.3%
(2) No	86.0%	85.3%	100.0%	98.7%

WHAT IS YOUR AGE?

The series below illustrates the age of weekend passengers. Nearly a quarter (23.8%) of passengers indicated their age is between 25-34, compared to 19.5% of passengers that indicated their age is between 35-44.

Table 6-21: What is your age?

What is your age?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
15 and under	1.6%	1.7%	0.0%	0.0%
16 - 17	2.0%	2.1%	0.0%	0.0%
18 - 24	12.6%	11.3%	6.6%	36.5%
25 - 34	23.8%	23.8%	84.6%	19.6%
35 - 44	19.5%	20.5%	6.6%	1.3%
45 - 54	16.2%	16.5%	0.0%	11.7%
55 - 64	15.8%	15.9%	2.2%	15.7%
65 and older	8.5%	8.2%	0.0%	15.2%

WHAT IS YOUR RACE / ETHNICITY? (CHECK ALL THAT APPLY)...

The series below shows the race/ethnicity of weekend passengers. Passengers were able to select from 'American Indian/Alaskan Native,' 'Asian,' 'Black/African American,' 'White/Caucasian,' and/or 'Native Hawaiian/Pacific Islander.' Totals add up to more than 100% because respondents were encouraged to check all answers that applied. Over sixty percent of passengers (64.8%) indicated they were "White/Caucasian," compared to the next highest group (13.6%) of passengers who reported "Black / African American."

Passengers were then also asked if they were Hispanic, Latino, or Spanish origin. Nearly one-third of passengers reported "Yes," they were of Hispanic, Latino, or Spanish origin (35.7%).

Table 6-22: What is your Race / Ethnicity? (check all that apply)...

What is your Race / Ethnicity? (check all that apply)...	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
White / Caucasian	64.8%	63.9%	33.7%	84.2%
Black / African American	13.6%	14.2%	0.0%	3.0%
Asian	2.7%	2.3%	0.0%	8.9%
Prefer not to answer	6.6%	7.0%	0.0%	0.0%
American Indian / Alaska Native	11.7%	11.9%	66.3%	3.9%
Native Hawaiian / Pacific Islander	0.6%	0.7%	0.0%	0.0%

Table 6-23: Are you of Hispanic, Latino, or Spanish origin?

Are you of Hispanic, Latino, or Spanish origin? (includes: Mexican/Mexican American, Puerto Rican, Cuban/Cuban	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Choose not to answer	1.0%	1.1%	0.0%	0.0%
(1) Yes	35.7%	36.4%	72.9%	20.4%
(2) No	63.3%	62.5%	27.1%	79.6%

DO YOU SPEAK A LANGUAGE OTHER THAN ENGLISH AT HOME?

The language spoken at the homes of weekend passengers is displayed in the series below. Over a quarter (28.7%) of passengers indicated they spoke a language other than English at home. Of those passengers, nearly ninety percent (86.8%) indicated they spoke English "Very well" as shown the second chart in the series. Table 6-25A shows the other languages spoken at home.

Table 6-24: Do you speak a language other than English at home?

Do you speak a language other than English at home?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
(1) Yes	28.7%	28.7%	72.9%	25.7%
(2) No	71.3%	71.3%	27.1%	74.3%

HOW WELL DO YOU SPEAK ENGLISH?

Table 6-25: How well do you speak English?

How well do you speak English?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Not at all	1.4%	1.5%	0.0%	0.0%
Well	4.2%	4.4%	0.0%	0.0%
Less than well	7.5%	8.0%	0.0%	0.0%
Very well	86.8%	86.1%	100.0%	100.0%

Table 6-26A: Other Languages Spoke at Home

Language respondent speaks at home other than English	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Spanish	79.6%	81.0%	100.0%	43.4%
Arabic, Standard	2.3%	2.4%	0.0%	0.0%
Other	2.0%	2.1%	0.0%	0.0%
Hindi	1.9%	1.0%	0.0%	22.6%
Chinese	1.3%	1.4%	0.0%	0.0%
German	1.3%	1.3%	0.0%	0.0%
American Sign Language (ASL)	1.2%	0.8%	0.0%	11.3%
Italian	1.2%	1.3%	0.0%	0.0%
French	1.0%	1.1%	0.0%	0.0%
Japanese	0.8%	0.9%	0.0%	0.0%
Farsi, Eastern	0.8%	0.8%	0.0%	0.0%
Navajo	0.8%	0.3%	0.0%	11.3%
Chinese, Mandarin	0.8%	0.8%	0.0%	0.0%
Tagalog	0.6%	0.6%	0.0%	0.0%
Latin	0.5%	0.6%	0.0%	0.0%
Urdu	0.5%	0.5%	0.0%	0.0%
Swahili	0.5%	0.5%	0.0%	0.0%
Thai	0.5%	0.5%	0.0%	0.0%
Serbian	0.5%	0.0%	0.0%	11.3%
Portuguese	0.4%	0.4%	0.0%	0.0%
Sicilian	0.4%	0.4%	0.0%	0.0%
Russian	0.4%	0.4%	0.0%	0.0%
Ayiwo	0.2%	0.2%	0.0%	0.0%
Hebrew	0.2%	0.2%	0.0%	0.0%
Old Spanish	0.2%	0.2%	0.0%	0.0%
Vietnamese	0.0%	0.0%	0.0%	0.0%

WHAT IS YOUR GENDER? …

The gender of weekend passengers is presented in the series below. Over half the passengers (67.7%) indicated they were male, compared to 31.2% who indicated they were female.

Table 6-27: What is your gender?…

What is your gender?…	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Male	67.7%	69.0%	33.7%	45.9%
Female	31.2%	30.2%	66.3%	48.9%
Non-binary / third gender	0.5%	0.4%	0.0%	2.6%
Prefer not to say	0.3%	0.2%	0.0%	2.6%
Transgender	0.2%	0.2%	0.0%	0.0%

WHICH OF THE FOLLOWING BEST DESCRIBES YOUR TOTAL ANNUAL HOUSEHOLD INCOME IN 2021 BEFORE TAXES?

The series below shows the Total Annual Household Income for weekend passengers' household. Over half (67.91%) the passengers indicated their household income is below "$25,000", compared to 22.2% of passengers with household income between "$25,000 - $50,000", and 9.9% of passengers with household income of "$50,000 or more". Nearly twenty percent (19.6%) of respondents refused or did not answer the question.

Table 6-28: Which of the following BEST describes your TOTAL ANNUAL HOUSEHOLD INCOME in 2021 before taxes?

Which of the following BEST describes your TOTAL ANNUAL HOUSEHOLD INCOME in 2021 before taxes?	Total Weight Factor (%)	SUNTRAN	SUNSHUTTLE	SUNLINK
Less than $10,000	36.2%	35.8%	10.5%	42.2%
$10,000 - $14,999	13.5%	13.3%	0.0%	17.0%
$15,000 - $24,999	18.2%	18.9%	0.0%	7.3%
$25,000 - $34,999	13.7%	14.5%	21.0%	0.0%
$35,000 - $49,999	8.5%	8.5%	0.0%	10.2%
$50,000 - $74,999	6.5%	6.8%	68.5%	0.0%
$75,000 - $99,999	1.9%	1.7%	0.0%	5.8%
$100,000 or more	1.5%	0.5%	0.0%	17.5%

Chapter 3. SURVEY METHODOLOGY

SAMPLING PLAN

Origin-Destination (OD) Survey

To ensure that the distribution of completed surveys mirrors the distribution of the region's passengers, ETC Institute, The City of Tucson, and Sun Tran established proportional sampling goals. ETC Institute developed a sampling plan that would ensure the completion of the Weekday OD survey by at least 5,102 weekday passengers. Overall, a total of 6,721 weekday surveys were collected. The weekend sampling goals were set to collect a total of 768 surveys, and a total of 978 weekend surveys were collected.

Tables 1 through 3 show the weekday sampling goals by system that were used to guide the collection by route, time period, and direction. Table 4 shows the weekend sampling goals for all systems by day type. The ridership data that supported these goals was collected between September 13th, 2021 and November 24th, 2021.

Table 29 - OD Weekday Sampling Goals SunTran

		Sampling Goals							COMPLETED						
Route #	Direction	Early AM (Before 6:30am)	AM Peak (6:30-8:30am)	Midday (8:30am-4:00pm)	PM Peak (4:00-6:00pm)	Evening (6:00pm-3:00am)	Total	Total Surveys	Early AM (Before 6:30am)	AM Peak (6:30-8:30am)	Midday (8:30am-4:00pm)	PM Peak (4:00-6:00pm)	Evening (6:00pm-3:00am)	Total	Total Surveys
1	EASTBOUND	0	4	17	6	5	33	78	9	9	24	9	8	59	118
	WESTBOUND	2	5	16	4	3	30		3	9	28	10	9	59	
2	NORTHBOUND	2	3	17	4	3	29	62	3	6	27	9	6	51	102
	SOUTHBOUND	0	2	6	2	3	13		2	6	21	12	10	51	
3	EASTBOUND	3	12	37	10	7	69	209	7	14	67	16	17	121	253
	WESTBOUND	5	15	39	6	5	70		5	25	72	16	14	132	
4	EASTBOUND	4	15	65	19	22	126	355	16	21	140	33	25	235	472
	WESTBOUND	7	14	59	13	17	111		9	29	124	34	41	237	
5	EASTBOUND	1	4	13	3	1	21	66	3	9	32	2	11	57	117
	WESTBOUND	1	6	13	3	1	23		2	9	39	4	6	60	
6	NORTHBOUND	2	6	35	10	9	62	183	3	16	55	15	16	105	206
	SOUTHBOUND	2	9	35	9	5	60		7	14	46	18	16	101	
7	EASTBOUND	2	10	36	10	9	67	197	5	11	72	32	16	136	251
	WESTBOUND	4	9	35	9	6	64		4	15	63	21	12	115	
8	EASTBOUND	7	16	58	15	14	109	313	20	21	125	18	25	209	416
	WESTBOUND	6	12	56	13	12	99		8	30	118	31	20	207	
9	EASTBOUND	4	10	42	9	9	74	229	7	13	76	17	17	130	268
	WESTBOUND	5	11	43	11	9	78		6	16	87	13	16	138	
10	NORTHBOUND	1	6	18	5	6	36	104	4	7	33	13	11	68	139
	SOUTHBOUND	2	4	19	5	4	33		3	13	34	11	10	71	
11	NORTHBOUND	5	8	38	11	8	70	253	8	33	70	26	18	155	310
	SOUTHBOUND	7	14	52	13	13	99		12	24	69	22	28	155	
12	NORTHBOUND	2	9	20	5	6	43	128	3	12	37	10	8	70	133
	SOUTHBOUND	1	6	22	7	8	43		2	11	27	12	11	63	
15	NORTHBOUND	1	3	14	4	2	25	81	2	6	24	8	9	49	99
	SOUTHBOUND	1	5	17	4	2	29		2	8	26	6	8	50	
16	NORTHBOUND	3	17	65	15	18	118	305	7	24	99	30	18	178	365
	SOUTHBOUND	5	10	46	11	13	86		6	23	88	35	35	187	
17	NORTHWEST	8	11	40	7	7	73	221	13	14	73	32	22	154	306
	SOUTHEAST	4	10	41	9	10	74		6	33	67	30	16	152	
18	NORTHBOUND	5	12	57	13	12	99	297	9	28	102	25	28	192	375
	SOUTHBOUND	3	9	58	16	13	99		16	23	98	28	18	183	

Route #	Direction	Sampling Goals							COMPLETED						
		Early AM (Before 6:30am)	AM Peak (6:30-8:30am)	Midday (8:30am-4:00pm)	PM Peak (4:00-6:00pm)	Evening (6:00pm-3:00am)	Total	Total Surveys	Early AM (Before 6:30am)	AM Peak (6:30-8:30am)	Midday (8:30am-4:00pm)	PM Peak (4:00-6:00pm)	Evening (6:00pm-3:00am)	Total	Total Surveys
19	NORTHBOUND	1	2	8	3	4	17	46	3	6	20	12	10	51	95
	SOUTHBOUND	0	1	6	2	4	14		2	6	21	8	7	44	
21	NORTHBOUND	0	1	8	2	2	12	35	2	4	11	5	7	29	57
	SOUTHBOUND	0	2	7	2	1	11		0	4	12	3	9	28	
22	NORTHBOUND	0	0	2	2	1	5	11	1	1	6	2	3	13	22
	SOUTHBOUND	0	0	1	0	0	2		1	1	4	1	2	9	
23	NORTHBOUND	3	4	20	5	2	34	111	6	5	41	7	5	64	132
	SOUTHBOUND	2	4	21	6	6	40		4	5	41	11	7	68	
24	Circulator	1	3	15	5	3	29	43	2	5	31	11	7	56	56
		0	0	0	0	0	0		0	0	0	0	0	0	
25	NORTHBOUND	5	7	26	6	5	49	145	6	16	47	21	16	106	191
	SOUTHBOUND	2	7	22	8	9	48		13	11	36	12	13	85	
26	EASTBOUND	1	2	9	4	4	20	60	1	6	12	7	9	35	70
	WESTBOUND	1	3	12	3	2	21		2	4	17	3	9	35	
27	NORTHBOUND	2	3	9	3	2	18	50	4	8	17	7	5	41	78
	SOUTHBOUND	0	2	8	2	2	15		1	6	17	5	8	37	
29	EASTBOUND	3	5	15	4	4	30	97	4	5	24	10	8	51	102
	WESTBOUND	1	4	18	5	7	34		1	4	27	7	12	51	
34	NORTHBOUND	3	10	39	8	7	68	209	7	11	75	15	15	123	262
	SOUTHBOUND	4	11	38	11	8	71		4	16	76	27	16	139	
37	NORTHBOUND	1	3	7	3	1	14	46	1	7	16	7	12	43	84
	SOUTHBOUND	1	2	9	3	1	17		2	6	23	3	7	41	
50	EASTBOUND	0	2	5	1	1	9	21	1	4	7	1	2	15	35
	WESTBOUND	0	0	3	1	1	5		1	2	11	3	3	20	
61	NORTHBOUND	1	2	2	1	0	6	26	3	4	18	3	4	32	57
	SOUTHBOUND	0	2	7	2	1	11		1	4	13	4	3	25	
101X	EASTBOUND	0	0	0	2	0	2	3	0	0	0	0	3	3	3
	WESTBOUND	0	1	0	0	0	1		0	0	0	0	0	0	
102X	NORTHBOUND	0	0	0	0	0	0	2	0	0	0	0	5	5	5
	SOUTHBOUND	0	1	0	0	0	1		0	0	0	0	0	0	
103X	NORTHBOUND	0	0	0	1	0	1	1	0	0	0	0	2	2	3
	SOUTHBOUND	0	1	0	0	0	1		0	1	0	0	0	1	
104X	NORTHBOUND	0	0	0	0	0	0	1	0	0	0	0	1	1	1
	SOUTHBOUND	0	1	0	0	0	1		0	0	0	0	0	0	
105X	NORTHBOUND	0	0	0	1	0	1	2	0	0	0	0	3	3	3
	SOUTHBOUND	0	1	0	0	0	1		0	0	0	0	0	0	
107X	NORTHBOUND	0	0	0	1	0	1	2	0	0	0	0	3	3	5
	SOUTHBOUND	0	1	0	0	0	1		0	0	0	1	1	2	
108X	EASTBOUND	0	0	0	1	0	1	1	0	0	0	0	2	2	2
	WESTBOUND	0	0	0	0	0	0		0	0	0	0	0	0	
109X	EASTBOUND	0	0	0	0	0	0	1	0	0	0	0	1	1	1
	WESTBOUND	0	0	0	0	0	0		0	0	0	0	0	0	
110X	NORTHBOUND	0	0	0	0	0	0	1	0	0	0	0	1	1	3
	SOUTHBOUND	0	0	0	1	0	1		0	0	0	0	2	2	
201X	EASTBOUND	0	0	0	1	0	1	2	0	0	0	0	2	2	2
	WESTBOUND	0	1	0	0	0	1		0	0	0	0	0	0	
203X	NORTHBOUND	0	0	0	1	0	1	3	2	0	4	0	3	9	9
	SOUTHBOUND	0	1	0	0	0	1		0	0	0	0	0	0	
204X		0	0	0	1	0	1	2	0	0	2	0	2	4	4
	SOUTHBOUND	0	1	0	0	0	1		0	0	0	0	0	0	
	TOTALS	136	376	1,447	382	340	2,682	4,001	287	684	2,692	794	755	5,212	5,212

Table 30 - OD Weekday Sampling Goals SunLink

ROUTE_SURVEYED	AGENCY	AM Peak (Before 8:30am)	Midday (8:30am-4:00pm)	PM Peak (4:00-6:00pm)	Evening (6:00pm-3:00am)	Total	Total Surveys	AM Peak (Before 8:30am)	Midday (8:30am-4:00pm)	PM Peak (4:00-6:00pm)	Evening (6:00pm-3:00am)	Total	Total Surveys
Sun Link WESTBOUND	SUN LINK	8	154	49	71	282	1026	34	367	147	166	714	1409
Sun Link EASTBOUND	SUN LINK	19	136	27	48	230		41	459	94	101	695	
TOTAL		**28**	**291**	**76**	**118**	**513**	**1,026**	**75**	**826**	**241**	**267**	**1,409**	**1,409**

Table 31 - OD Weekday Sampling Goals SunShuttle

			Sampling Goals					COMPLETED				
Route #	Route Name	Direction	AM Peak (Before 8:30am)	Midday (8:30am-4:00pm)	PM Peak and Evening (4:00pm and after)	Total	Total Surveys	AM Peak (Before 8:30am)	Midday (8:30am-4:00pm)	PM Peak and Evening (4:00pm and after)	Total	Total Surveys
401	N. Oracle/Catalina	NORTHBOUND	1	1	0	2	5	1	1	0	2	5
		SOUTHBOUND	0	1	0	2		1	2	0	3	
410	Anway/Trico	EASTBOUND	1	1	0	2	3	0	2	0	2	2
		WESTBOUND	0	0	0	0		0	0	0	0	
412	Thornydale/River	NORTHBOUND	1	3	1	5	11	2	4	0	6	10
		SOUTHBOUND	1	2	1	4		0	4	0	4	
413	Marana/I-10	NORTHBOUND	0	1	1	2	6	1	1	0	2	8
		SOUTHBOUND	1	2	0	3		1	5	0	6	
421	Green Valley/Sahuarita Connector	NORTHBOUND	1	2	0	4	10	0	0	0	0	7
		SOUTHBOUND	1	2	1	4		3	4	0	7	
430	Tucson Estates	EASTBOUND	1	1	0	3	12	3	1	0	4	8
		WESTBOUND	1	4	2	7		1	3	0	4	
440	San Xavier	NORTHBOUND	2	2	2	5	13	2	4	0	6	14
		SOUTHBOUND	1	2	2	5		3	5	0	8	
450	Southeast Tucson/Rita Ranch	NORTHBOUND	1	1	0	2	5	3	2	0	5	6
		SOUTHBOUND	0	1	0	2		0	1	0	1	
486	Ajo/Tucson	EASTBOUND	0	0	0	0	8	6	0	0	6	7
		WESTBOUND	0	0	0	0		1	0	0	1	
TOTALS			12	27	12	50	75	28	39	0	67	67

Table 32 – Weekend Sampling Goals by Day Type

Route	Sampling Goals			COMPLETED		
	Saturday	Sunday	Grand Total	Saturday	Sunday	Grand Total
1	9	8	17	17	8	25
2	5	5	10	6	6	12
3	13	9	22	18	9	27
4	32	24	56	44	24	68
5	5	4	9	6	4	10
6	18	7	25	33	7	40
7	14	8	22	40	8	48
8	38	29	67	49	31	80
9	16	11	27	16	18	34
10	8	7	15	12	7	19
11	25	22	47	26	35	61
12	8	12	20	11	14	25
15	4	4	8	5	8	13
16	34	29	63	36	29	65
17	13	8	21	19	15	34
18	34	27	61	38	27	65
19	12	7	19	19	8	27
21	5	4	9	5	6	11
22	1	1	2	3	3	6
23	8	6	14	13	6	19
24	4	8	12	4	4	8
25	13	4	17	21	8	29
26	5	2	7	5	6	11
27	3	2	5	4	3	7
29	7	4	11	8	4	12
34	13	9	22	29	9	38
37	4	3	7	5	5	10
50	2	2	4	8	2	10
61	2	2	4	4	4	8
412 SunShuttle	1	0	1	4	0	4
413 SunShuttle	1	0	1	1	0	1
440 SunShuttle	1	0	1	1	0	1
SunLink	104	35	139	108	42	150
Grand Total	**462**	**303**	**765**	**618**	**360**	**978**

On-to-Off (O2O) Survey

The sampling plan for the O2O counts were designed to obtain complete weekday boarding-alighting pairs from a minimum of 20% of the daily ridership (7,665 pairs) on all routes selected for the O2O collection. ETC collected a total of 8,127 boarding-alighting pairs. The sample plan in Table 5 below shows the goals for each line by route, time, and direction.

Table 33 – On-to-Off Sampling Goals

	O2O SUMMARY COLLECTED						O2O GOAL					
ROUTE	EARLY AM / AM PEAK	MIDDAY	PM PEAK	EVE	Grand Total	Total Surveys	EARLY AM / AM PEAK	MIDDAY	PM PEAK	EVE	Grand Total	Total Surveys
11 Alvernon Way NORTHBOUND	42	148	46	29	265	504	25	70	21	14	131	422
11 Alvernon Way SOUTHBOUND	60	127	26	26	239		39	97	24	25	186	
16 Oracle/Ina NORTHBOUND	49	179	72	44	344	616	38	122	28	33	221	509
16 Oracle/Ina SOUTHBOUND	49	99	62	62	272		28	87	21	25	161	
18 S 6th Ave NORTHBOUND	40	219	65	67	391	841	33	108	24	22	186	495
18 S 6th Ave SOUTHBOUND	72	264	53	61	450		23	108	29	24	185	
4 Speedway EASTBOUND	40	177	52	50	319	609	35	122	36	42	236	591
4 Speedway WESTBOUND	41	169	28	52	290		40	111	25	32	208	
8 Broadway EASTBOUND	41	144	66	62	313	590	43	108	27	26	205	521
8 Broadway WESTBOUND	29	148	42	58	277		34	105	24	23	186	
SUNLINK EASTBOUND	126	1083	440	800	2449	4967	193	1365	267	478	2303	5127
SUNLINK WESTBOUND	76	987	540	915	2518		85	1544	490	705	2824	
Grand Total	**665**	**3744**	**1492**	**2226**	**8127**	**8127**	**616**	**3947**	**1019**	**1449**	**7030**	**7665**

Survey Instrument

The survey was designed to obtain information in three major categories: origin-destination (OD) travel patterns, usage information, and rider demographics. Once the survey questionnaire had been finalized, ETC designed a tablet-based intercept interview survey as the primary survey medium. The survey is included as Appendix A. The weekend survey was designed to mimic the weekday OD survey but did not capture location coordinates for riders' origin, destination, boarding, and alighting locations. The survey was created to ensure that Title VI requirements were met and to provide additional information on riders.

The tablet survey methodology utilized the tablets on-screen mapping features which allowed for real-time geocoding of addresses and locations using exact addresses, intersections, and/or place names. The riders would then confirm the geocoded locations on the map via on-screen indicator icons. The interviewers used the mapping feature to collect the global positioning system (GPS) coordinates of all survey locations (home address, origin address, destination address, boarding location(s), and alighting location(s). This allowed the interviewer to answer questions as well as ensure the accuracy of the data collected. The respondent was allowed to select the answers to some demographic questions directly on the tablet to allow for enhanced privacy (e.g. household income, gender).

Respondents who did not have time to complete the survey during their trip were given the option to receive a phone call later to complete the survey.

A paper instrument was used for Sun Shuttle Route 486 which was distributed and collected by the shuttle drivers. These paper surveys were then sent to ETC which then entered the survey data into their survey program.

In addition, ETC created an additional survey that was included for passengers who were not headed to a specific destination but were simply riding the vehicle. Two percent of the weekday surveys and four percent of weekend surveys that were conducted were with passengers riding the vehicle with no end point and are shown as "No Particular Destination" for trip purpose in Chapters 1 and 2.

Chapter 4. SURVEY ADMINISTRATION

Labor Recruitment and Training

Assembling a team of high-quality surveying staff was one of the most important steps in the OD administration process. ETC collaborated with a staffing firm to provide interviewers for the OD survey and utilized survey supervisors to survey as well.

The training session focused on the survey purpose and objectives, the survey instrument, scripts on how to respond to passengers' questions, how to use data collection tools correctly, random sampling protocols, instructions on how to conduct themselves when working with the public, and safety training. Survey staff were instructed to understand that, while they were not Sun Tran employees, they were representing the agency while on transit vehicles or property and that they needed to act in a manner that reflected positively on Sun Tran. A total of two training sessions conducted throughout the data collection process.

Maximizing participation and legitimizing the survey among passengers depended on the public perception of survey staff. To support a good public image, ETC imposed strict dress code standards that required all survey staff to wear clean, appropriate, clothing to present a casual, yet neat, appearance that exuded professionalism and comfort. Survey staff were provided with badges and vests to identify interviewers to both Sun Tran staff and passengers to further legitimize their appearance. The badge and dress code standards promoted a professional appearance and reinforced survey legitimacy, which increased passengers' trust in the interviewers and the process.

Training OD Interviewers

The ETC Field Supervisor created the necessary training materials and conducted the OD training. The classroom training session included a PowerPoint presentation to explain the purpose and objectives of the survey, questionnaire content, interviewer procedures and requirements, random sampling protocols, survey logistics, how to maximize response rates (including difficult-to-survey passengers), and the data collection process in a step-by-step format. Other goals of the training included building the confidence of interview staff, helping interview staff feel that they are an important part of the survey's success, and helping them understand the importance of the survey and the long-term benefits it brings to their community.

ETC ensured training addressed the following details:

- Tips on intercepting/interacting with non-English speakers and passengers with limited English proficiency.
- Cultural sensitivity.
- Importance of understanding the intent of the questions.
- Instructions on conveying the purpose of the survey to passengers.
- Importance of adhering to our random sampling protocol at the outset of every survey.
- Procedure for properly recording all refusals and completing a short observational assessment of the refusing passenger for internal purposes.
- Importance of data confidentiality and instruction on how to address passenger concerns regarding same.

- Overview of the transit system covering all topics covered in the tablet questionnaire with route-specific instruction as needed.
- How to handle passenger comments and complaints.
- Safety training.

Toward the end of training, interviewers conducted mock interviews using the survey tablets. This allowed ETC staff to gauge each interviewer's comprehension of the survey and instruments and provide feedback as needed. After the training, interviewers were tested on items discussed in training.

Following classroom training, applicants got a chance to conduct interviews under the supervision of an experienced ETC supervisor. Supervisors oversaw interviewers and provided feedback on performance throughout the day.

Interviewers who were conducting the survey properly could go to the next phase of field training. Interviewers who needed more help but showed promise were asked to spend a second day in the field under direct supervision. Once an interviewer had demonstrated proficiency under direct supervision, they were given a field test during which the prospective interviewer conducted surveys on their own. During this period, the interviewer's productivity and data quality were remotely assessed by ETC's staff.

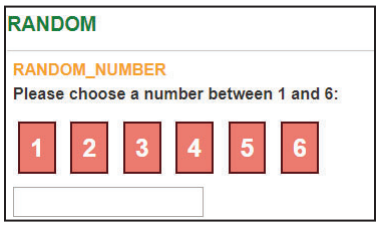
Survey Administration

Selection Of Participants

For the OD interview, the tablet generated a random number (shown in Figure 1) to determine which passengers were asked to participate in the survey after boarding the vehicle.

If four people boarded a bus, the tablet randomly generated a number from 1 to 4. If the tablet responded 2, the second person who boarded the bus was asked to participate in the survey. If the tablet responded 1, the first person was asked to participate in the survey, and so forth. The selection was limited to the first six people who boarded a bus or train at any given stop to ensure the interviewer could keep track of the passengers as they boarded.

Figure 1 - OD Survey Random Number Generator



For example, if 20 people boarded a vehicle, the tablet program would randomly pick one of the first six people for the survey. If the interview was refused by the randomly selected passenger, then the passenger who boarded before the passenger selected would be attempted.

Respondents who did not have time to complete the survey during their bus trip, or who spoke a language different from that of the interviewer, were given the option of providing their phone numbers to conduct the survey by phone at another time. Those who provided their phone numbers for were then contacted by ETC Institute's call center to complete the survey. Interviewers that spoke the foreign language of the passenger translated the English tablet version during the interview and indicated which language the interview was conducted in.

Origin Destination Procedures

Interviewers selected passengers in accordance with the same sampling procedures previously described. The interviewer then:

- Approached the passenger, identified themselves, and asked the passenger to participate in the survey.
- If the passenger refused, the interviewer ended the survey, excused themselves, and completed three observational questions (age, race, and gender).
- If the passenger agreed to participate, the interviewer asked the passenger if they had at least 5 minutes to complete the survey.
- If the passenger did not have at least 5 minutes on the bus, the interviewer asked the passenger to provide their name and phone number for a call-back in the event that they alighted prior to completing the survey. The interviewer continued to capture data until the passenger alighted the vehicle. A phone interviewer from ETC Institute's call center contacted the respondent and asked them to provide the remaining information by phone if the interview was not completed on the vehicle. This methodology ensured that people who completed short trips on public transit were well represented. Most records were able to be completed on-board with only a nominal number of records completed by phone.
- If the person had at least 5 minutes on the bus, the interviewer completed the survey on the vehicle.

On-to-Off Procedures

The bus O2O counts were collected using ETC's proprietary software running on GPS-capable tablets equipped with barcode scanners. Tablets on-board the same bus were paired before each data collection session began. The passengers' routes, directions of travel, and boarding and alighting information (time, latitude and longitude) was captured with a high degree of accuracy via the following process:

- Transit passengers were asked to participate as they entered the transit vehicle.
- Each passenger entering the bus was handed a barcoded card immediately after the card was scanned by ETC's on-board team member.
- Passengers were asked to keep the bar-coded card for the duration of their trip on that transit vehicle.

Passenger were asked to hand their cards back as they exited the vehicle and the cards were scanned as they exited the bus.

The O2O software sent the scanned data to the O2O server where a server-side processing system evaluated the data and paired the boarding and the alighting locations of each passenger based on the unique barcode, time stamps, and other variables. Before any collection took place, staff were trained on every aspect of the on-board O2O process. Supervisory staff administered a variety of quality control checks during tablet set-up, including review of Route #, Team #, Block #, Run #, Bus #, and Partner Tablet ID #. The O2O software was centered on a live map of the current transit route and associated stops. ETC's on-board data collection staff could follow the

map of the route and accurately select the passengers' boarding and alighting locations. Route termini were clearly marked on the map and the user was alerted when approaching a route terminus, at which point, the session was closed and a new session was initiated when the bus/train began a new run.

For the Sun Link, counters asked passengers at which stops they entered, if not observed, and exited the train. The count data was immediately uploaded to a secure server for monitoring and reporting purposes. Validations screened out any individual records boarding stations that were the same the alighting station (i.e.: 4th and 4th station to 4th and 4th station).

In-Field Quality Assurance/Quality Control

ETC Institute field supervisors reviewed each interviewer's data scrutinizing the following elements to ensure they were administering the interview properly:

- Distribution of surveys by demographics.
- Distribution of surveys by trip characteristics.
- Length of each survey in minutes.
- Percentage of refusals.
- Percentage of short trips.

In addition to daily reviews of demographic responses, the field manager created a comprehensive weekly report.

Data Collection Issues

Overall, there were no issues with passengers participating in the survey. The key issues that arose during data collection included:

- Personnel issues with survey staff

  -Many survey staff were terminated and we reduced to a core team
- Issues with passengers stealing counters' personal belongings

  -Survey staff were instructed to leave belongings at home
- Issues with passengers damaging buses while staff were on-board

  -Sun Tran was contacted regarding all safety issues
- Issues going after station level cell goals on the Sun Link

  -We stationed staff for an entire day to try to reach some station level goals

Chapter 5. DATA REVIEW PROCESS

Many of the monitoring processes described previously in the report are essential elements of the overall quality assurance/quality control (QA/QC) process that was implemented throughout the survey. The establishment of specific sampling goals and procedures for managing the goals ensured that a representative sample was obtained. The geocoding tools embedded in Google map searches, ETC Institute Visual Review program, and Caliper® Maptitude geographic information system (GIS) software, allowed for the geocoding accuracy that was achieved.

The following subsections describe the QA/QC processes that were utilized after the data were collected.

Process For Identifying Complete Records

To classify a survey as being complete, the record must contain all elements of the one-way trip. ETC Institute has classified complete trip data as containing complete answers to the following:

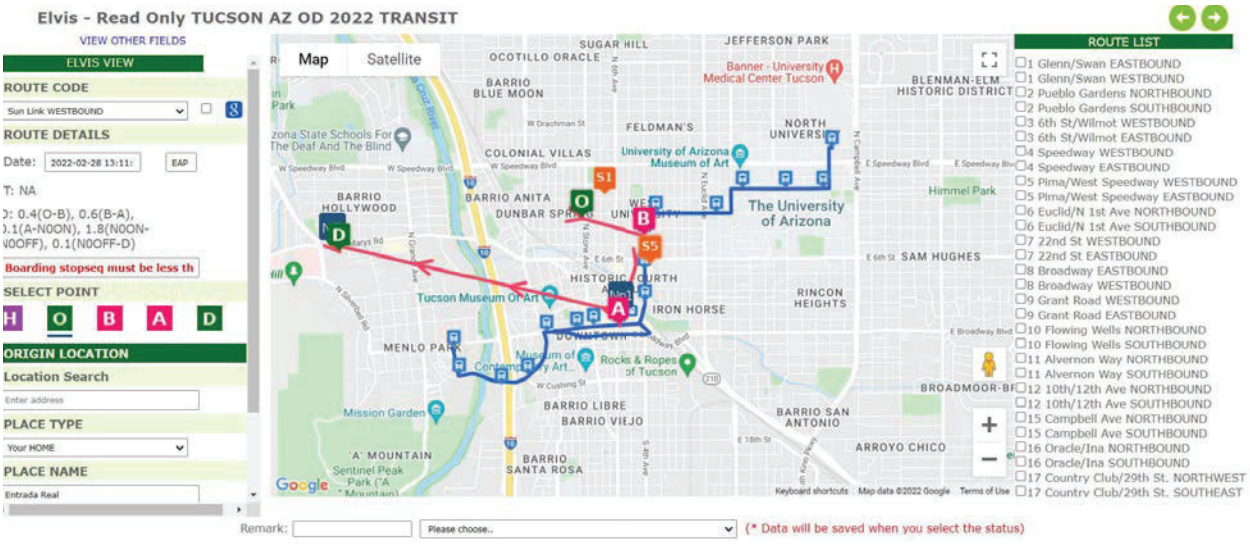
- Route/Direction
- Time of trip
- Transfers made
- Home address
- Origin address
- Destination address
- Origin place type
- Destination place type
- Access mode
- Egress mode
- Boarding location
- Alighting location

In addition to the required trip-data questions, an interview must be considered complete by the online survey program. This occurs if the interviewer navigates through all questions from the survey, including demographics.

Online Visual Review Tool

ETC Institute's online visual review tool allowed for the review of all completed records. The tool displayed all elements of the one-way trip, as well as a series of distance ratio checks. After directions were finalized, each record went through speed/distance/time checks. Figure 2 shows an example of the online visual review tool.

Figure 2 - Online Visual Review Tool (Editable Version)



Pre-Distance Checks

The series of distance and ratio checks were contained in the online visual review tool for ETC Institute's Transit Review Team (TRT) to systematically approach the reviewing of completed records. The TRT process for editing surveys is described later in this section. *Note: The distance and ratio checks described are meant to alert the reviewer that closer evaluation may be needed. However, this does not indicate the record was inaccurate or unusable.*

The distances for the checks are created using the great-circle distance formula that is based on a straight line from point A to point B that considers the curvature of the earth. Some of the distance checks are listed below:

- Access/Egress-Mode Distance Check (distances from origin to boarding and alighting to destination).
- Origin-to-Destination Check (distance from origin to destination).
- Boarding-and-Alighting Distance Check (distance checks from boarding to alighting location).

Pre-Ratio Checks

After all transfer reviews were conducted, three QA/QC ratio checks were conducted. First, the distance between the boarding and alighting location was divided by the distance between origin and destination. Second, the distance between origin and boarding locations was divided by the distance between the origin and destination. Third, the distance between the alighting location and destination was divided by the distance between origin and destination.

Transit Review Team

The TRT reviewed all completed records, paying special attention to records that were flagged by the previously described checks. Typically, around 10 percent of all records receive an automatic flag. The issues listed in Table 4 result in actions that allow about 30 percent of those records that are flagged to be retained.

Table 34 - General Issues

Issue	Description of Issue	Action
Origin/Destination Condition 1	Origin/Destination appears incorrect because the wrong location of a multiple-location organization was selected	If, for example, an Origin/Destination appears illogical based on the college campus that was selected, but an appropriate campus of the same college does appear logical given the other points and answer choices of the trip, then the appropriate campus will be selected.
Origin/Destination Condition 2	Origin/Destination appears to have been geocoded to the incorrect city/state	If for example, an Origin/Destination appears illogical based on the city/state that was geocoded, but the address/intersection is logical within the trip if the city/state are changed. This occurs occasionally because the interviewer selects the wrong choice from the list of address choices that appear in the online survey instrument, then the appropriate address information will be inserted.
Access/Egress Mode	Access/Egress Mode seems illogical based on trip	If the access/egress mode involves the use of a vehicle and the distance from either origin to boarding or alighting to destination is less than 0.2 miles, then the access/egress mode is recoded to walk/walked and that change will be reflected in the database.
Directionality of Record	Boarding and alighting locations indicate that the trip is going in the opposite direction of what was selected by the interviewer	Change direction of route selected and, if necessary, update boarding and alighting locations based on appropriate direction.

Post-Processing Additional Checks

After records were reviewed by the TRT, the next step involves the application of QA/QC non-trip checks. Non-trip related checks included:

- Ensuring the respondents who indicated they were employed reported that at least one member of the household was employed.
- Ensuring the time-of-day a survey was completed was reasonable given the published operating schedule for the route.
- Ensuring that the appropriate fare type was used given the age of respondent.
- Removing personal information to protect the anonymity of the respondents.

Once all records complete the pre-processing and post-processing QA/QC checks, those deemed complete and usable are appended to the completion report to ensure that goals are met. After the final review is completed, a data dictionary was created to describe the data in the database.

Chapter 6. SURVEY WEIGHTING AND EXPANSION

Interviews were expanded by route, direction, time-of-day, and by segments containing the boarding and corresponding alighting location of the passenger. The following sections describe the methodology that was used to develop the unlinked expansion factors.

When survey quantity goals are created, they are typically based upon a percentage of the average weekday ridership for the routes in the system. These are further broken down by time periods and directions. The time periods that are created (e.g., 9 am to 3 pm) are based off the specific needs of ARC systems.

The purpose of developing survey quantity goals is to collect an appropriate number of survey records that will be expanded to represent the total average weekday ridership of each route by time and direction. To further increase the specificity of the expansion process, segments were created for each route. Stops were grouped into segments along that route so that boarding segments could be paired with alighting segments when creating the expansion factor. Segmentation occurs on bus routes because it is unrealistic to expand bus survey data at the stop level.

Stop/station-level expansion is generally reserved for rail lines as passengers more typically remember the stop they got on and off the rail. Rail expansion is similar to Type 1 expansion with the only difference being that the stations are not segmented into 3 segments but are rather kept at the station-level.

The ridership provided for the goal creation is not the ridership used for expansion. Once the OD data collection was finished then the various agencies provided updated ridership data that was representative of the OD collection period. That updated ridership data was used for the expansion purposes described in this section.

Route Segmentation Procedures

Route Segmentation with APC Data

There are two ways ETC Institute creates segments for bus routes: 1) boarding percentages of the route from APC data by direction, and 2) based on the number of stops for the route and direction. When possible, segmenting routes using APC data is the preferred way to segment routes as opposed to segmenting routes based on the number of stops.

Routes with both APC data and On-to-Off counts are separated based on direction, then divided into three segments based on the total boardings. After approximately one-third of the route's total APC ridership has boarded, a new segment begins. After approximately two-thirds of the route's total APC ridership has boarded the third segment begins. The table at the top of the following page is a simplified example of APC Data Segmenting for a route with both APC data and On-to-Off counts. *(Note: Iterative Proportional Fitting (IPF) is discussed later in Type 1 expansion later this document. For IPF to work properly, the boarding totals must match the alighting totals. For this reason, APC alightings are adjusted using a multiplying factor in order to make sure their overall totals match the overall boarding totals. These are typically nominal alterations, however, if there are significant differences in boarding and alighting totals by direction of a route, it may require additional review of the functionality of the route to ensure that the surveys are both collected and expanded appropriately.)*

Table 35 – Route Segmenting: APC Provided Routes with On-to-Off Counts

Segmentation with APC Example					
Direction: Eastbound	APC DATA		Segmentation		
Stops	Boardings	Alightings	Running Total of Boardings	Running Percentage of Total Boardings	Segment
Stop 1	35	0	35	23.0%	1
Stop 2	20	10	55	36.2%	1
Stop 3	20	5	75	49.3%	2
Stop 4	15	10	90	59.2%	2
Stop 5	5	12	95	62.5%	2
Stop 6	4	4	99	65.1%	2
Stop 7	19	4	118	77.6%	3
Stop 8	12	3	130	85.5%	3
Stop 9	15	5	145	95.4%	3
Stop 10	3	10	148	97.4%	3
Stop 11	2	15	150	98.7%	3
Stop 12	2	11	152	100.0%	3
Stop 13	0	10	152	100.0%	3
Stop 14	0	15	152	100.0%	3
Stop 15	0	38	152	100.0%	3
	152	152			

If On-to-Off counts are not collected, but APC data is available, those routes are typically segmented into 2 segments by time and direction boarding totals. The reason for that is that one can only accurately determine the flows between two segments when you have only APC data. Those routes are segmented similarly to the process above with the main difference being that the second segment begins after approximately half of the route's total APC ridership has boarded. When a route is segmented in half, you have the possibility of three boarding to alighting cell combinations: board segment 1 to alight segment 1, board segment 1 to alight segment 2, board segment 2 to alight segment 2. *Note: board segment 2 to alight segment 1 is not possible as that would indicate the individual was traveling in the opposite direction. Also, some route directions may only receive 2 segments if one stop (generally the first boarding stop for the specific route direction) has an inordinately high boarding percentage of greater than 50%).* When you have 3 segments you have twice (6) the number of possible boarding to alighting pair combination possibilities.

Route Segmentation without APC Data

Routes without APC data are divided into three segments based on the total number of stops. After approximately one-third of the route's stops occurred, a new segment begins. After approximately two-thirds of the route's stops have occurred, the final segment begins. Below is an example of segmenting without APC Data.

Table 36 – Route Segmenting: Non- APC Provided Routes

Segmentation without STOP-LEVEL RIDERSHIP Example														
Direction: Eastbound														
Stops	Stop 1	Stop 2	Stop 3	Stop 4	Stop 5	Stop 6	Stop 7	Stop 8	Stop 9	Stop 10	Stop 11	Stop 12	Stop 13	Stop 14
Segment	1	1	1	1	1	2	2	2	2	2	3	3	3	3

Expansion Types

The type of bus data expansion conducted depended on the data available for the specific route. The three types of data that created the combinations that guided the type of expansion used were:

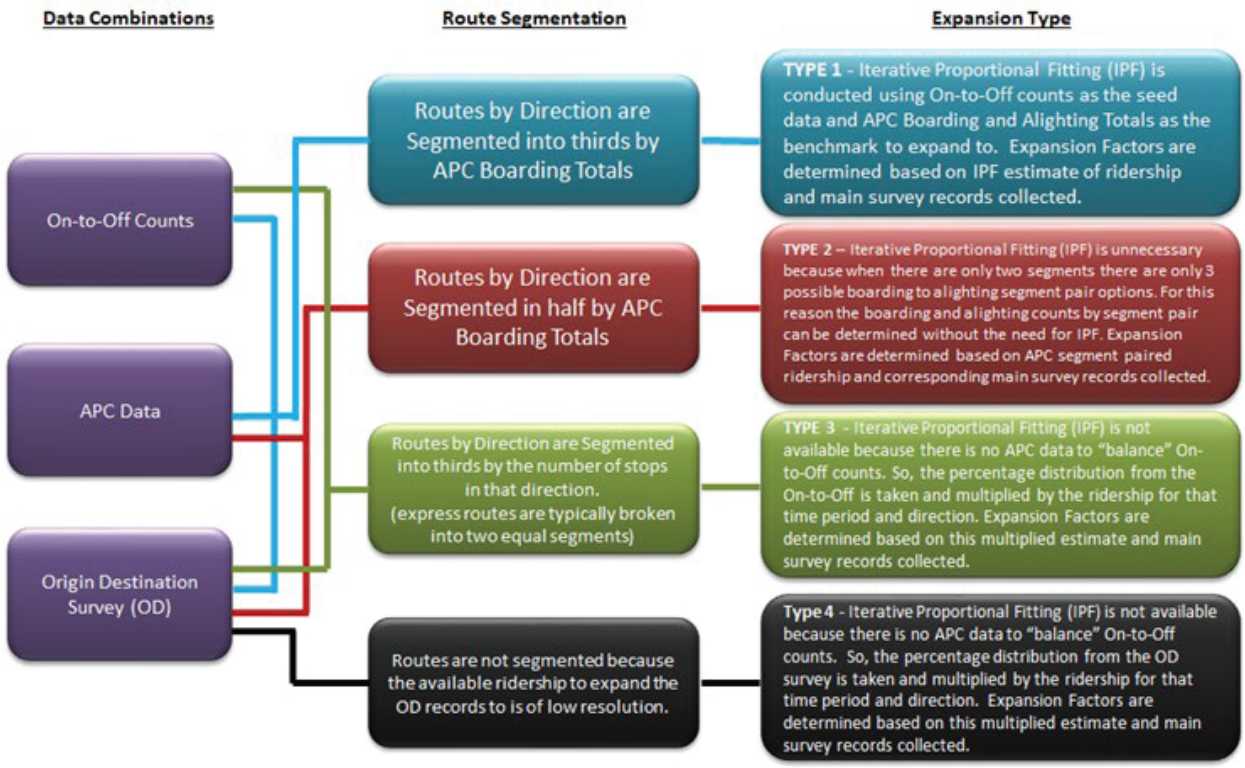
1. Stop-Level Ridership/Automatic Passenger Counter (APC) Data (from ARC agencies),
2. On-to-Off counts data (collected by ETC Institute), and
3. OD Survey Data (collected by ETC Institute).

These three different data types determine the type of expansion (1, 2, 3, or 4 as shown below) that will be used for a route.

Notes: 1) All types of expansion are conducted at the route, time and direction level. Some more rudimentary expansion occurs when the level of ridership information is of a lower resolution. 2) During Iterative Proportional Fitting, the On-to-Off data serves as the "Seed" data while the APC boarding and alighting counts serve as the totals or "Benchmarks" that the On-to-off data is expanded to. After those two pieces of data finish going through the IPF process the result is a final estimate of ridership flows between segment pairs for that route, direction, and time. These final estimated segment to segment pair ridership flow counts are then divided by the corresponding number of OD surveys in the same segment to segment pair. 3) Type 3 expansion was not utilized for this project.

The figure below shows the data type (On-to-off counts, APC data, OD data) combinations along with the corresponding types of route segmentation and type of expansion used.

Figure 3 – Data Combination, Route Segmentation, and Expansion Type

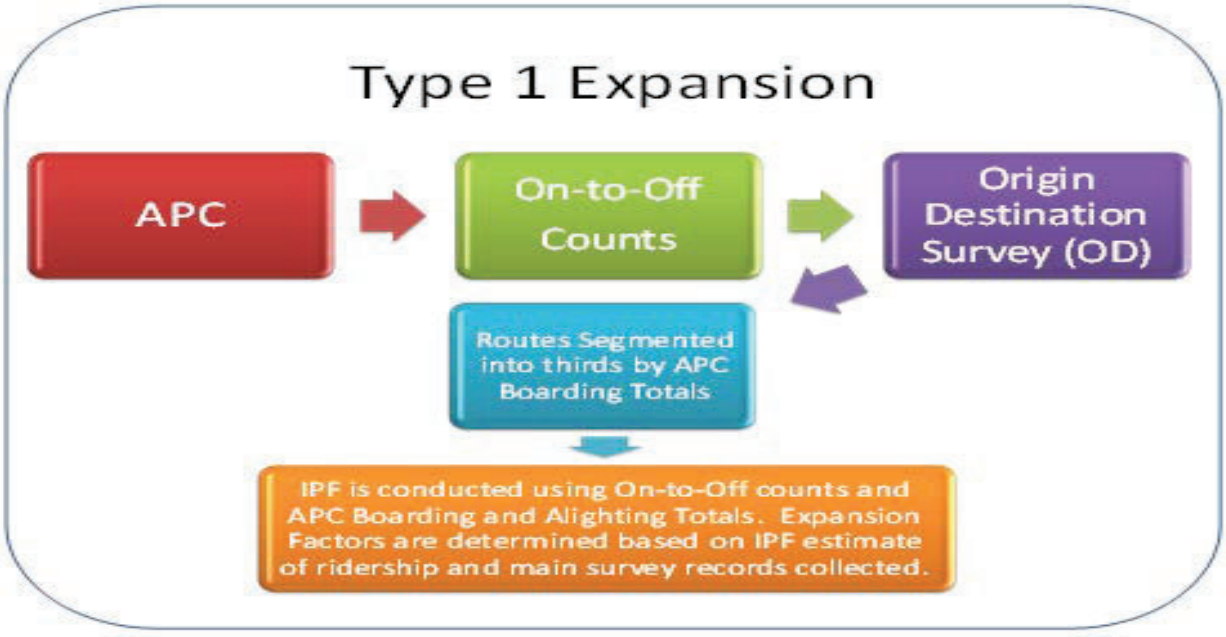


In the subsequent explanation of expansion types, Iterative Proportional Fitting (IPF) is utilized where possible. IPF is an algorithm ETC Institute utilizes to balance the differences between the ridership projected from the On-to-Off counts and the APC ridership for each segment. Further detail on the IPF process is explained under Type 1 expansion.

Type 1 Expansion: Routes with APC Data, On-to-Off Counts, and OD Survey Data

Of the four types of bus expansion discussed, Type 1 Expansion is the preferred method as it incorporates all three types of data available. Typically, On-to-Off data collection is reserved for more heavily traveled routes, so this type of expansion was conducted on the more heavily traveled routes in the system and occurred after route stops were divided into *three segments based on total boarding distribution by direction. The APC daily ridership totals were provided by the appropriate agencies. The segments were then appended to both the On-to-Off counts and the OD data.

Figure 4 – Type 1 Expansion



An example of the methodology for Type 1 Expansion is as follows:

Type 1: Expansion Methodology for Bus Routes with Stop-Level APC Data, On-to-Off Data, and OD Survey Data

Once the segments were appended to the On-to-Off counts, APC data, and OD Survey databases, the records were ready for expansion. A simplified version of the process for how the data was expanded in Type 1 Expansion is explained below:

Figure 5 shows the segmented results for the On-to-Off counts that were administered for a certain route, direction, and time. Each row in the table identifies the segment where passengers boarded the bus. The columns in the table identify where passengers alighted the bus. For example, 20 of the On-to-Off counts had passenger board in segment 2 and alighting in segment 3.

Note: The On-to-Off counts serve as the seed data in the IPF process while the APC boarding totals and alighting totals serve as the "Benchmark" totals that the On-to-Off counts are expanded to.

Figure 5 – Results of the On-to-Off Survey

Route: Example Eastbound (6am-9am)		ACTUAL RIDERSHIP COUNTS FROM THE ON/OFF SURVEY		
Segment	Total	1	2	3
1	60	5	15	40
2	45		25	20
3	10			10
Total	115	5	40	70

Figure 5 shows the distribution of the data in Figure 6 expressed as a percentage of all boardings for the specific time and direction. Figure 6 was created by dividing each On-to-Off cell in Figure 5 by the sum of all On-to-Off counts in Figure 5, which is 115. For example, 20/115 (17.4%) of all trips boarded in segment 2 and alighted in segment 3 as shown in Figure 6.

Figure 6 – Distribution of the On-to-Off Survey

Route: Example Eastbound (6am-9am)		PERCENTAGE DISTRIBUTION OF RIDERSHIP COUNTS FROM THE ON/OFF SURVEY		
Segment	Total	1	2	3
1	52.2%	4.3%	13.0%	34.8%
2	39.1%	0.0%	21.7%	17.4%
3	8.7%	0.0%	0.0%	8.7%
Total	100.0%	4.3%	34.8%	60.9%

The total ridership for the route, time, and direction was applied to the On-to-Off distribution percentages shown in Figure 6.

This produces an initial estimate of the ridership flow for the boarding segment to the alighting segment as shown in Figure 7. Applying the actual ridership of 320 creates an initial estimate of 56 trips (17.4% x 320) boarding in segment 2 and alighting in segment 3.

Figure 7 – Initial Estimate of Ridership Flows Between Stations

(percentages in table 2 were applied to the total boardings for this time period in this direction)				
Route: Example Eastbound (6am-9am)		PROJECTED RIDERSHIP BASED ON THE ON-TO-OFF SURVEY		
Segment	Total	1	2	3
1	167	14	42	111
2	125	0	70	56
3	28	0	0	28
Total	320	14	111	195

To develop a more accurate estimate of the ridership flows between segments on each route, ETC Institute developed an Iterative Proportional Fitting (IPF) Algorithm to balance the differences between the ridership projected from the On-to-Off counts (shown in Figure 6) and the APC ridership for each segment (shown in Figure 7). The IPF process is described below:

Figure 8 – Boardings and Alightings by Station

Route: Example Eastbound (6am-9am)				
Average Weekday Ridership	Total	1	2	3
BOARDINGS	320	100	100	120
ALIGHTINGS	320	20	100	200
DIFFERENCE FROM PROJECTED				
BOARDINGS	0	-67	-25	92
ALIGHTINGS	0	6	-11	5

Step 1: Correction for the Boardings

The estimated ridership from the On-to-Off counts for each route (as shown in Figure 10) was multiplied by the ratio of the actual boardings from Stop-Level Ridership/APC Data for each segment by the estimated boardings for each segment. For example, if the actual boardings for Segment 1 were 120 and the estimated boardings were 100, each cell associated with Segment 1 would have been multiplied by 1.2 (120/100) to adjust the estimated boardings to actual boardings.

Step 2: Correction for the Alightings

Once the correction in Step 1 was applied, the estimated boardings would be equal to the actual boardings. However, the adjustment to the boardings total may have changed the alighting estimates. To correct the alighting estimates, the new values calculated in Step 1 were adjusted by multiplying the ratio of the actual alightings from the Stop-Level Ridership/APC Data for each stop by the estimated alightings for each segment from Step 1. For example, if the actual alightings for Segment 2 were 220 and the estimated alightings from Step 1 were 200, each cell associated with Segment 2 would have been multiplied by 1.1 (220/200) to adjust the estimated alightings from Step 1 to actual alightings.

The processes described in Steps 1 and 2 were repeated sequentially until the difference between the actual and estimated boardings and alightings was zero. Figure 9 shows that after seven balancing iterations in this algorithm, there were no differences between the projected distribution and the actual boardings and alightings.

Figure 9 – Seventh Step of Iterative Balancing to Correct Distribution of Ridership by Alighting Location

Segment	Total	DIFFERENCE FROM ACTUAL BOARDINGS	1	2	3
1	100	0	20	32	49
2	100	0	0	68	32
3	120	0	0	0	120
Total	320	0	20	100	200
DIFFERENCE FROM ACTUAL ALIGHTINGS	0		0	0	0

7th STEP of ITERATIVE BALANCING TO CORRECT DISTRIBUTION OF RIDERSHIP BY BOARDING LOCATION

Segment	Total	DIFFERENCE FROM ACTUAL BOARDINGS	1	2	3
1	100	0	20	32	48
2	100	0	0	68	32
3	120	0	0	0	120
Total	320	0	20	100	200
DIFFERENCE FROM ACTUAL ALIGHTINGS	0		0	0	0

The final estimate for ridership flows is shown in Figure 10.

Figure 10 – Final Estimate of Ridership Between Stations

Route: Example Eastbound (6am-9am)				
Segment	Total	1	2	3
1	100	20	32	48
2	100	0	68	32
3	120	0	0	120
Total	320	20	100	200
DIFFERENCE FROM ACTUAL ALIGHTINGS	0	0	0	0

The actual number of OD records completed for each boarding-to-alighting segment pair is shown in Figure 10. To calculate the expansion factors, the final estimate of ridership between segments shown in Figure 9 was divided by the actual number of OD records collected, as shown in Figure 10. This calculation produces the expansion factors shown in Figure 11. For example, the 32 estimated passengers projected to board in segment 2 and alight in segment 3 were divided by the 10 OD records to produce an expansion factor of 3.15 to be applied to records who board in segment 2 and alighting in segment 3 as shown in Figure 12.

Figure 11 – Number of Completed Surveys

Route: Example Eastbound (6am-9am)				
Segment	Total	1	2	3
1	32	3	9	20
2	17		7	10
3	8			8
Total	57	3	16	38

Figure 12 – Weighting Factors

Route: Example Eastbound (6am-9am)				
Segment	Boarding Segment Expansion Factors	1	2	3
1	3.13	6.67	3.50	2.42
2	5.88	0.00	9.78	3.15
3	15.00	0.00	0.00	15.00
Alighting Segment Expansion Factors	5.61	6.67	6.25	5.26

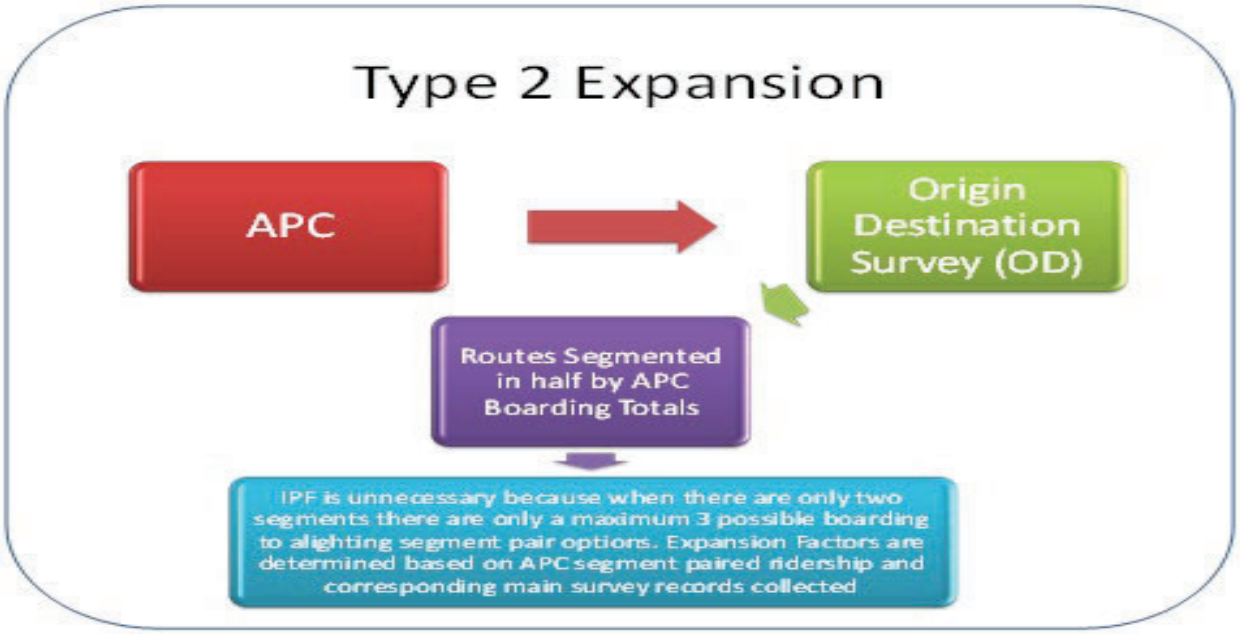
The following routes were expanded using the Type 1 expansion method described on the previous pages:

Table 37 – Routes Expanded Using Type 1 Expansion

Expansion Type 1 Routes	Segments Created
4 Speedway	3
8 Broadway	3
11 Alvernon	3
16 Oracle / Ina	3
18 S. 6th Avenue	3
SUNLINK	7

Type 2 Expansion: Bus Routes with APC Data, OD Survey Data, but No On-to-Off Counts Data

For Type 2 expansion, On-to-Off counts are not collected; however, these routes still have APC data available. This type of expansion divides the stops into ***two*** segments based on total boarding distribution by direction. Iterative Proportional Fitting (IPF) is unnecessary because when there are only 2 segments there are only a maximum of 3 possible boarding to alighting segment pair options. The boarding and alighting counts by segment pair can be determined without the need for IPF.



After the segmentation process, the segments were then appended to the APC dataset and OD dataset. The next step was to determine how much ridership belonged into each paired boarding to alighting segment for each route, direction, and time. The figure below shows an example of what the segments look like after being appended to the APC data for the appropriate route, direction, and time.

Figure 13 – Segment Examples for Type 2 Expansion

Route X Eastbound during the AM Peak			
Stops	Boardings	Alightings	Segment
Stop 1	15	0	1
Stop 2	3	3	1
Stop 3	5	4	1
Stop 4	3	7	1
Stop 5	3	3	1
Stop 6	4	3	2
Stop 7	3	4	2
Stop 8	10	5	2
Stop 9	8	10	2
Stop 10	7	5	2
Stop 11	1	8	2
Stop 12	0	10	2
	62	62	

In the previous figure you can see the boardings and alightings for each stop along with the segments. With two segments you have three possible boarding to alighting pair options: a) boarding segment 1 to alighting segment 1, b) boarding segment 1 to alighting segment 2 and c) boarding segment 2 to alighting segment 2. Boarding segment 2 to alighting segment 1 is not an option as that means the rider would be going in the opposite direction. In the case of this example, the rider would be heading westbound if they boarded segment 2 and alighted on segment 1. To determine the ridership for the possible boarding to alighting pairs in this example we start with boarding segment 1 to alighting segment 1. This is simple to determine as you simply add up the alightings for those stops associated with segment 1 which equals 17. Since these 17 people alighted in segment 1 that means they must have boarded on stops within segment 1, so boarding to alighting pair (1 to 1) for this route, time and direction has 17 boardings and 17 alightings. For boarding to alighting pair (2 to 2) instead of looking at the alightings we instead look at the boardings. Adding up the boardings for segment 2 in the example above shows 33 total boardings. If those riders boarded within segment 2, then they must have alighted within segment 2 as well which means boarding to alighting pair (2 to 2) for this route, time and direction has 33 boardings and 33 alightings. This only leaves boarding-to-alighting segment pair 1 to 2. This can be determined two different ways. Adding up all the boardings for segment 1 gives us a total of 29 boardings. We have already determined that 17 of those segments 1 boardings alighted within segment 1, which means the remaining segment 1 boardings must have alighted within segment 2, which gives us 12 boardings and 12 alightings for segment pair 1 to 2 (29-17). Likewise, you can sum up the total number of alightings for segment 2 which equals 45 alightings. We have already determined that 33 of those segments 2 alightings boarded within segment 2, which means the remaining segment 2 alightings must have boarded within segment 1, which also gives us 12 boardings and 12 alightings for segment pair 1 to 2 (45-33).

The final step in the process is simply to append the appropriate boarding and alighting segments to each record in the OD dataset based on route, direction, time, boarding location, and alighting location. Then divide the appropriate segment to segment pair ridership, calculated as described previously, by the corresponding number of records that match the same route, direction, time and boarding segment to alighting segment. For example, in the previously described scenario for Route X heading eastbound in the "AM Peak" time we had 12 riders boarding on segment 1 and alighting on segment 2. If we had 4 OD surveys that were also Route X heading eastbound during the "AM Peak" time that boarded within segment 1 and alighted within segment 2, we would just divide 12 riders by 4 surveys to produce an unlinked weight factor of 3 for each of the 4 OD surveys. These unlinked weight factors are then appended to the OD dataset, summed by route, direction, and time to ensure that the total summed unlinked weight factors match the provided APC boardings by route, direction, and time.

The following routes were expanded using the Type 2 expansion method described on the previous page:

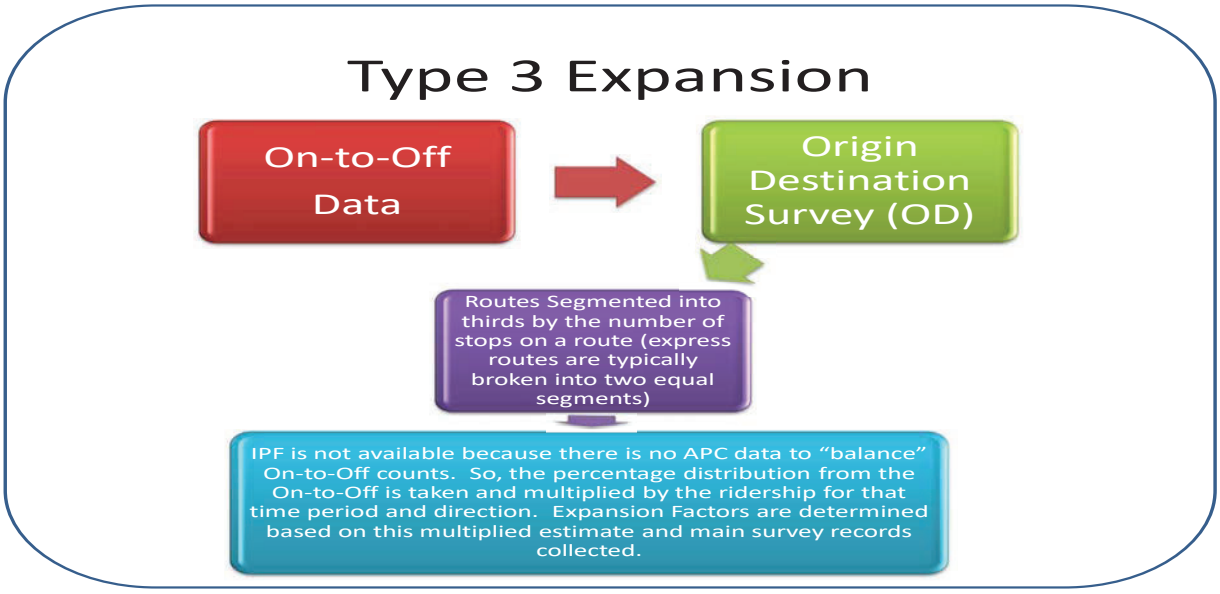
Table 38 – Routes Expanded Using Type 2 Expansion

Expansion Type 2 Routes	Segments Created
1 Glenn/Swan	2
2 Pueblo Gardens	2
3 6th St/Wilmot	2
5 Pima/West Speedway	2
6 Euclid/N 1st Ave	2
7 22nd St	2
9 Grant Road	2
10 Flowing Wells	2
12 10th/12th Ave	2
15 Campbell Ave	2
17 Country Club/29th St.	2
19 Stone Ave	2
21 Congress/Silverbell	2
22 El Rio/W. Speedway	2
23 Mission Road	2
24 S 12th Ave	2
25 S Park Ave	2
26 Benson Highway	2
27 Midvale Park	2
29 Valencia	2
34 Craycroft/Ft Lowell	2
37 Pantano	2
50 Ajo Way	2
61 La Cholla	2
101X Golf Links-Downtown Express	2
102X Northwest-UA Express	2
103X Northwest-Downtown Express	2
104X Marana-Downtown Express	2
105X Foothills-Downtown Express	2
107X Oro Valley-Downtown Express	2
108X Broadway-Downtown Express	2
109X Catalina Hwy-Downtown Express	2
110X Rita Ranch-Downtown Express	2
201X Eastside-Aero Park Express	2
203X Oro Valley-Aero Park Express	2
204X Northwest- Aero Park Express	2

Type 3 Expansion: Bus Routes with On-to-Off Counts and OD Survey Data, but Without APC Data

Expansion Type 3 is utilized for routes where On-to-Off counts are collected but APC Data is not available. In this expansion method, routes without APC Data are segmented into three segments based on number of stops along a route. For example, if Route X has 30 stops, then the first ten stops would be Segment 1, the second ten stops would be Segment 2, and the remaining ten stops would be Segment 3. These segments were then appended to the On-to-Off and OD survey databases. The data is then expanded using a similar process to the previous expansion methods by route and direction. Instead of using APC Data in this expansion process, however, it is only expanded using the OD Survey Data and the On-to-Off Counts.

Figure 14 – Type 3 Expansion



No routes were expanded using Type 3 Expansion

Type 4 Expansion: Bus Routes with OD Survey Data, without On-to-Off Counts Data, or APC Data

For routes that ***only*** have OD survey data, Type 4 expansion is utilized. For this type of expansion there is no stop level data available. For this reason, a more rudimentary form of expansion must take place. The level of granularity for average daily ridership that can be provided from the agency determines the level of granularity for which expansion can occur. For example, when average daily ridership figures were available by route, time and direction the number of OD surveys captured for that route, time and direction were directly divided into the corresponding ridership provided. Alternatively, when average daily ridership figures were only available for the entire route and not broken down into time or direction, the number of OD surveys captured for that route were directly divided into the corresponding ridership provided.

All routes that were surveyed on Saturday and Sunday were expanded using Type 4 expansion since no boarding location was acquired due to the nature of the weekend survey and limited expansion segmentation and the weekday routes listed below.

Table 39 – Routes Expanded Using Type 4 Expansion

Expansion Type 4 Routes
401 N Oracle/Catalina
410 Anway/Trico
412 Thornydale/Dove Mountain
413 Marana/I-10
421 Green Valley/Sahuarita Connector
430 Tucson Estates
440 San Xavier
450 Southeast Tucson/Rita Ranch
486 Ajo
All Weekend Routes

General Rule for Expansion Factors

While there are no specific guidelines for the expansion factor values, ETC Institute uses a guideline of keeping expansion factors below three times the average expansion factor based on the sampling percentage. This is done to keep any one record from representing a markedly high number of passengers in the system. The formula for determining this guideline is:

1 / (Sampling percentage) x 3 = Guideline Weight Factor

For example, if the sampling percentage is 10% for a route, then the guideline weight factor would be [1 / (10%)) * 3] = 30, so the guideline weight factor for that route would be 30. If a sampling percentage is 7.5% it would be 40 since [1 / (7.5%) * 3] = 40.

If the expansion factor for a boarding segment to alighting segment pair is greater than three times the average expansion factor, then it is aggregated into the adjacent boarding-to-alighting segment where it will have the least impact on the previously existing expansion factors. This guideline is standard for all the various expansion types.

Linked Trip Decomposition Analysis

Decomposition analysis measures the overall representativeness of the survey records relative to linked and unlinked trips on an individual route basis. Self-enumeration surveys have historically suffered from substantial errors in route level boarding levels when linked trips were determined by simply dividing the boarding factor by one plus the number of transfers.

The advent of the personal interview, coupled with tablet technology and more effective management of counters, has reduced this issue. The decomposition analysis examines each record and the recorded sequence of routes and tabulates boardings for each route using this information. After all records have been examined, total boardings by route are summarized and compared with the observed level of boardings. The result of this analysis will help to determine the relationship between observed and estimated boardings by route.

The decomposition analysis below and on the following pages show the summed link factors for the routes for which the survey was conducted along with the summed linked weight factors for

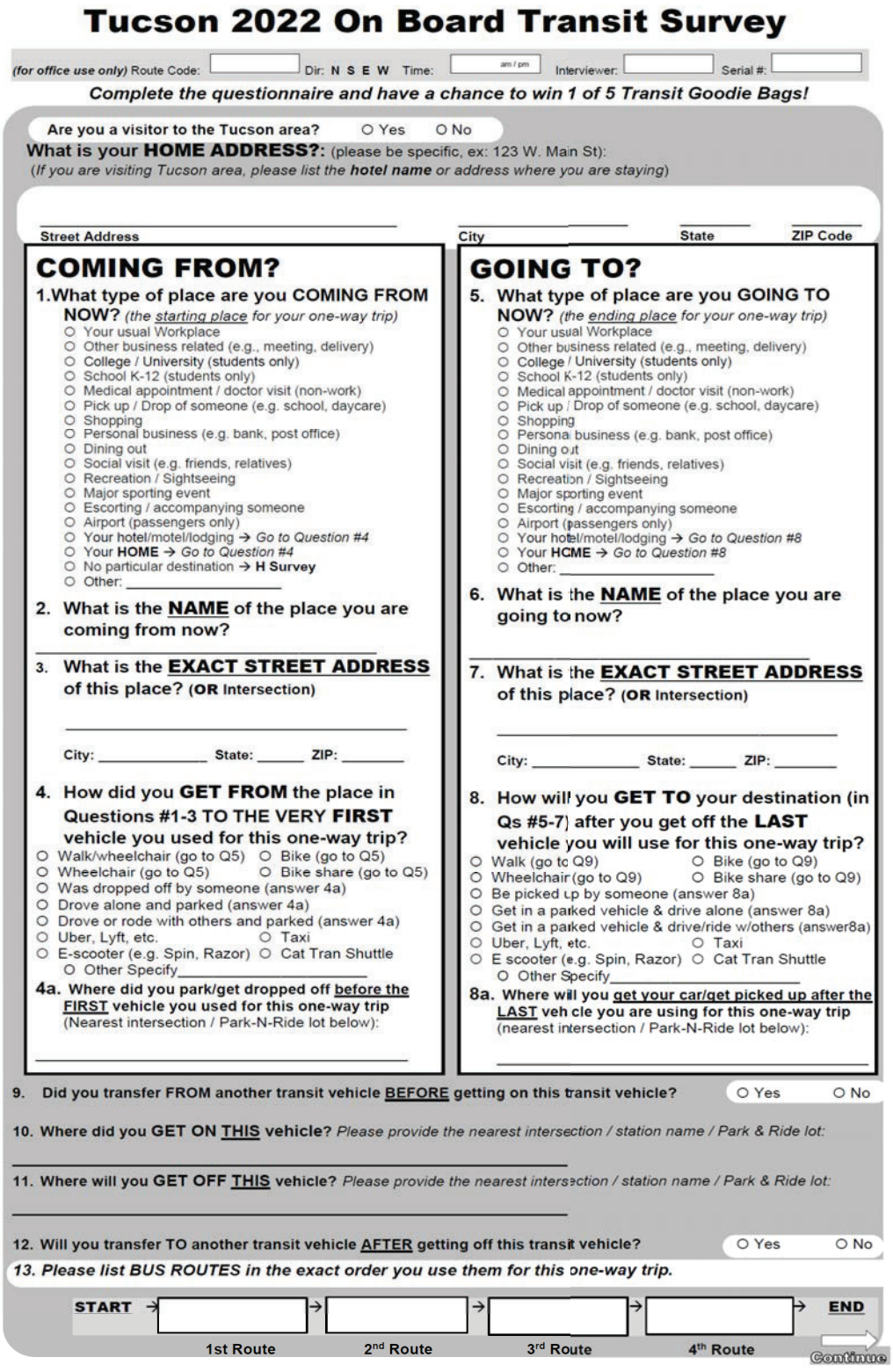
those same routes that was captured in transfer information for both previous transfers and transfers that would occur after the rider alighted the route they were being surveyed on. The findings from the decomposition analysis show that the overall results for the on-board survey do an excellent job of representing the system. In fact, at the overall level, there is .00% difference between the total boardings calculated from the summed linked weight factors and the observed ridership. The routes that deviate the farthest from the summed linked factors compared to the observed counts are typically the routes that are expected to deviate the most as they are low volume ridership routes and therefore have a higher inherit error probability.

The table on the following page shows the results at the route level.

Table 40 – Decomposition Analysis

Route Name	System	Route Surveyed	Transfer Route	tal Summed Link	bserved Boardin	Total Difference	% Difference
1 Glenn/Swan	Sun Tran	807.85	187.31	995.16	1019.00	23.84	2.3%
10 Flowing Wells	Sun Tran	753.94	177.89	931.83	991.00	59.17	6.0%
11 Alvernon Way	Sun Tran	2352.39	540.72	2893.10	3048.00	154.90	5.1%
110X Rita Ranch-Downtown Express	Sun Tran	14.17	0.45	14.62	17.00	2.38	14.0%
12 10th/12th Ave	Sun Tran	596.20	289.41	885.61	1026.00	140.39	13.7%
15 Campbell Ave	Sun Tran	634.93	133.18	768.11	722.00	-46.11	-6.4%
16 Oracle/Ina	Sun Tran	2432.21	698.13	3130.34	3264.00	133.66	4.1%
17 Country Club/29th St.	Sun Tran	1868.79	366.32	2235.11	2137.00	-98.11	-4.6%
18 S 6th Ave	Sun Tran	1837.37	756.20	2593.58	2793.00	199.42	7.1%
19 Stone Ave	Sun Tran	623.84	284.76	908.61	832.00	-76.61	-9.2%
2 Pueblo Gardens	Sun Tran	385.93	309.78	695.71	583.00	-112.71	-19.3%
21 Congress/Silverbell	Sun Tran	216.49	140.33	356.82	315.00	-41.82	-13.3%
22 El Rio/W. Speedway	Sun Tran	104.17	32.78	136.94	159.00	22.06	13.9%
23 Mission Road	Sun Tran	574.16	279.38	853.53	794.00	-59.53	-7.5%
24 S 12th Ave	Sun Tran	308.89	206.63	515.52	450.00	-65.52	-14.6%
25 S Park Ave	Sun Tran	1055.22	378.21	1433.43	1368.00	-65.43	-4.8%
26 Benson Highway	Sun Tran	404.73	162.97	567.71	600.00	32.29	5.4%
27 Midvale Park	Sun Tran	321.86	181.42	503.27	523.00	19.73	3.8%
29 Valencia	Sun Tran	640.01	300.29	940.30	862.00	-78.30	-9.1%
3 6th St/Wilmot	Sun Tran	1303.95	333.36	1637.32	1599.00	-38.32	-2.4%
34 Craycroft/Ft Lowell	Sun Tran	1560.42	369.96	1930.38	1984.00	53.62	2.7%
37 Pantano	Sun Tran	319.11	155.02	474.14	396.00	-78.14	-19.7%
4 Speedway	Sun Tran	2441.13	582.87	3024.00	2966.00	-58.00	-2.0%
5 Pima/West Speedway	Sun Tran	527.42	91.39	618.81	614.00	-4.81	-0.8%
50 Ajo Way	Sun Tran	169.53	57.83	227.36	245.00	17.64	7.2%
6 Euclid/N 1st Ave	Sun Tran	1207.16	400.81	1607.97	1576.00	-31.97	-2.0%
61 La Cholla	Sun Tran	163.53	139.05	302.57	233.00	-69.57	-29.9%
7 22nd St	Sun Tran	1299.85	418.42	1718.27	1704.00	-14.27	-0.8%
8 Broadway	Sun Tran	2281.40	656.82	2938.22	2960.00	21.78	0.7%
9 Grant Road	Sun Tran	1469.80	329.29	1799.10	1824.00	24.90	1.4%
700 Sun Link	Sun Link	4006.41	122.01	4128.42	4336.90	208.48	4.8%
101X Golf Links-Downtown Express	Sun Tran	19.17	2.05	21.21	23.00	1.79	7.8%
102X Northwest-UA Express	Sun Tran	20.00	8.92	28.92	20.00	-8.92	-44.6%
103X Northwest-Downtown Express	Sun Tran	8.00	1.90	9.90	8.00	-1.90	-23.8%
104X Marana-Downtown Express	Sun Tran	9.00	0.00	9.00	9.00	0.00	0.0%
105X Foothills-Downtown Express	Sun Tran	15.83	20.62	36.45	19.00	-17.45	-91.8%
107X Oro Valley-Downtown Express	Sun Tran	14.40	19.19	33.59	16.00	-17.59	-110.0%
108X Broadway-Downtown Express	Sun Tran	12.00	0.00	12.00	12.00	0.00	0.0%
109X Catalina Hwy-Downtown Expres	Sun Tran	7.00	13.42	20.42	7.00	-13.42	-191.7%
201X Eastside-Aero Park Express	Sun Tran	5.42	0.00	5.42	13.00	7.58	58.3%
203X Oro Valley-Aero Park Express	Sun Tran	16.00	7.75	23.75	18.00	-5.75	-32.0%
204X Northwest- Aero Park Express	Sun Tran	26.25	8.83	35.08	30.00	-5.08	-16.9%
401 N Oracle/Catalina	Sun Shuttle	13.97	35.49	49.46	28.39	-21.07	-74.2%
410 Anway/Trico	Sun Shuttle	10.77	2.09	12.86	16.88	4.02	23.8%
412 Thornydale/Dove Mountain	Sun Shuttle	34.92	48.81	83.73	45.84	-37.89	-82.7%
413 Marana/I-10	Sun Shuttle	16.96	28.64	45.59	26.79	-18.80	-70.2%
421 Green Valley/Sahuarita Connecto	Sun Shuttle	33.02	28.88	61.90	50.69	-11.21	-22.1%
430 Tucson Estates	Sun Shuttle	39.85	30.08	69.93	61.30	-8.63	-14.1%
440 San Xavier	Sun Shuttle	94.47	29.55	124.02	105.55	-18.47	-17.5%
450 Southeast Tucson/Rita Ranch	Sun Shuttle	11.60	17.90	29.50	22.27	-7.23	-32.5%
486 Ajo	Sun Shuttle	75.00	0.00	75.00	80.00	5.00	6.3%
	Total	33166.50	9387.12	42553.61	42553.61	0.00	0.00%

APPENDIX A: SURVEY INSTRUMENT



Tucson 2022 On Board Transit Survey

(for office use only) Route Code: ____ Dir: N S E W Time: ____ am / pm Interviewer: ____ Serial #: ____

Complete the questionnaire and have a chance to win 1 of 5 Transit Goodie Bags!

Are you a visitor to the Tucson area? ○ Yes ○ No

What is your HOME ADDRESS?: (please be specific, ex: 123 W. Main St):
*(If you are visiting Tucson area, please list the **hotel name** or address where you are staying)*

Street Address ____ City ____ State ____ ZIP Code ____

COMING FROM?

1. What type of place are you COMING FROM NOW? *(the starting place for your one-way trip)*
- ○ Your usual Workplace
- ○ Other business related (e.g., meeting, delivery)
- ○ College / University (students only)
- ○ School K-12 (students only)
- ○ Medical appointment / doctor visit (non-work)
- ○ Pick up / Drop of someone (e.g. school, daycare)
- ○ Shopping
- ○ Personal business (e.g. bank, post office)
- ○ Dining out
- ○ Social visit (e.g. friends, relatives)
- ○ Recreation / Sightseeing
- ○ Major sporting event
- ○ Escorting / accompanying someone
- ○ Airport (passengers only)
- ○ Your hotel/motel/lodging → *Go to Question #4*
- ○ Your **HOME** → *Go to Question #4*
- ○ No particular destination → **H Survey**
- ○ Other: ____

2. What is the NAME of the place you are coming from now?

3. What is the EXACT STREET ADDRESS of this place? (OR Intersection)

City: ____ State: ____ ZIP: ____

4. How did you GET FROM the place in Questions #1-3 TO THE VERY FIRST vehicle you used for this one-way trip?
- ○ Walk/wheelchair (go to Q5) ○ Bike (go to Q5)
- ○ Wheelchair (go to Q5) ○ Bike share (go to Q5)
- ○ Was dropped off by someone (answer 4a)
- ○ Drove alone and parked (answer 4a)
- ○ Drove or rode with others and parked (answer 4a)
- ○ Uber, Lyft, etc. ○ Taxi
- ○ E-scooter (e.g. Spin, Razor) ○ Cat Tran Shuttle
- ○ Other Specify____

4a. Where did you park/get dropped off before the FIRST vehicle you used for this one-way trip (Nearest intersection / Park-N-Ride lot below):

GOING TO?

5. What type of place are you GOING TO NOW? *(the ending place for your one-way trip)*
- ○ Your usual Workplace
- ○ Other business related (e.g., meeting, delivery)
- ○ College / University (students only)
- ○ School K-12 (students only)
- ○ Medical appointment / doctor visit (non-work)
- ○ Pick up / Drop of someone (e.g. school, daycare)
- ○ Shopping
- ○ Persona business (e.g. bank, post office)
- ○ Dining out
- ○ Social visit (e.g. friends, relatives)
- ○ Recreation / Sightseeing
- ○ Major sporting event
- ○ Escorting / accompanying someone
- ○ Airport (passengers only)
- ○ Your hotel/motel/lodging → *Go to Question #8*
- ○ Your HOME → *Go to Question #8*
- ○ Other: ____

6. What is the NAME of the place you are going to now?

7. What is the EXACT STREET ADDRESS of this place? (OR Intersection)

City: ____ State: ____ ZIP: ____

8. How will you GET TO your destination (in Qs #5-7) after you get off the LAST vehicle you will use for this one-way trip?
- ○ Walk (go to Q9) ○ Bike (go to Q9)
- ○ Wheelchair (go to Q9) ○ Bike share (go to Q9)
- ○ Be picked up by someone (answer 8a)
- ○ Get in a parked vehicle & drive alone (answer 8a)
- ○ Get in a parked vehicle & drive/ride w/others (answer8a)
- ○ Uber, Lyft, etc. ○ Taxi
- ○ E scooter (e.g. Spin, Razor) ○ Cat Tran Shuttle
- ○ Other Specify____

8a. Where will you get your car/get picked up after the LAST vehicle you are using for this one-way trip (nearest intersection / Park-N-Ride lot below):

9. Did you transfer FROM another transit vehicle BEFORE getting on this transit vehicle? ○ Yes ○ No

10. Where did you GET ON THIS vehicle? *Please provide the nearest intersection / station name / Park & Ride lot:*

11. Where will you GET OFF THIS vehicle? *Please provide the nearest intersection / station name / Park & Ride lot:*

12. Will you transfer TO another transit vehicle AFTER getting off this transit vehicle? ○ Yes ○ No

13. Please list BUS ROUTES in the exact order you use them for this one-way trip.

START → [ ] → [ ] → [ ] → [ ] → END

1st Route 2nd Route 3rd Route 4th Route

Continue

OTHER INFORMATION ABOUT THIS TRIP

14. **What time did you GET ON this vehicle?** _____ : _____ **a.m. / p.m. (circle one)**

15. **Will you make a RETURN TRIP today to get you back to the place where you started this one-way trip?** O No
O Yes, I will make a return trip in exactly the opposite direction today (or this is my return trip) at what time
_____:_____ am/pm (circle one)

16. **If fares were being collected, what fare category would apply to you?** O Don't know
O Regular (Full) Fare O Economy Senior fare O Economy Disabled fare O Economy Low-Income fare

17. **If fares were being collected, how would you pay for this one-way trip?**
O Don't know O Cash Fare O SunGo card (plastic) O Smart Phone / GOTucson Mobile App

18. **How would you have made this trip if Sun Tran, Sun Link, or Sun Shuttle were not available?**
O Drive own vehicle O Ride bicycle O Friend/family member O Walk
O Taxi/Uber O Would not make trip O Sun on demand O Other_____

ABOUT YOU AND YOUR HOUSEHOLD

19. **How many vehicles (cars, trucks, or motorcycles) are available to your household?** _____ vehicles

19a. **[If #19 is ONE OR MORE] Could you have used one of these vehicles to complete this trip?** O Yes O No

20. **Including YOU, how many people live in your household?** _____ people

21. **Including YOU, how many people (over age 15) in your household are employed full/part-time?** _____ people

22. **What is your employment status?** ***(check the one response that BEST describes you)***
O Employed full-time (at least 35 hrs/wk) O Employed part-time (less than 35 hrs/wk) O Retired
O Not currently employed, but seeking work O Not currently employed, and not seeking work O Homemaker

23. **What is your student status?** ***(check the one response that BEST describes you)***
O Not a student O Yes – Full-time college/university O Yes – Part-time college/university
O Yes – Vocational/technical/trade school O Yes – K-12th grade O Yes - Other

24. **Do you have a valid driver's license?** O Yes O No

25. **Do you have a disability that limits your mobility?** O Yes O No

26. **What is your Age?** O 15 & under O 16-17 O 18-24 O 25-34 O 35-44 O 45-54 O 55-64 O 65 & older

27. **Are you Hispanic, Latino, or Spanish origin?** O Yes O No O Choose not to answer
(includes: Mexican/Mexican American, Puerto Rican, Cuban/Cuban American, Columbian, Nicaraguan, Guatemala, etc.)

28. **What is your Race?** ***(check all that apply)***
O American Indian / Alaska Native O Asian O Black/African American
O Native Hawaiian / Pacific Islander O White / Caucasian O Other: _____

29. **Do you speak a language other than English at home?** O No O Yes - **Which language?** _____

29a. **[If #29 = Yes] How well do you speak English?** O Very well O Well O Less than well O Not at all

30. **What is your gender?** O Male O Female O Transgender O Non-binary/third gender
O Other/Prefer to self-describe O Prefer not to say

31. **Which of the following BEST describes your TOTAL ANNUAL HOUSEHOLD INCOME in 2021 before taxes?**
O Less than $10,000 O $15,000 - $24,999 O $35,000 - $49,999 O $75,000 - $99,999
O $10,000 - $14,999 O $25,000 - $34,999 O $50,000 - $74,999 O $100,000 or more

32. **What did you use to plan this trip?** O Paper schedule O Called customer service O Google Transit
O Online trip planner (suntran.com) O Sun Tran App O Did not do any trip planning O Other_____

33. **How often do you ride transit** (Sun Tran, Sun Link, Sun Shuttle)? O Everyday O 5 days/week
O 2-4 days/week O Once/week O 2-3 times/month O Once per month O Less than once per month

34. **How long have you been riding public transit in the Tucson area?**
O First time riding O Less than 1 year O 1-2 years O 2-5 years O 5-10 years O More than 10 years

35. **What is the service enhancement that is of most importance to you (select only one)?**
O More frequent service O Earlier operating hours O Later operating hours
O More weekend service O Shorter travel time O Different destinations O Other

REGISTER TO WIN 1 of 5 Transit Goodie Bags

People who submit an accurately completed survey will have the option of being entered in a random drawing for one of five Transit Goodie Bags. You must provide your home address at the beginning of the survey to be eligible.

Name: _____

Phone Number: (_____) _____

Email:_____

Are you willing to participate in future Tucson transit research and may we email/text you? O Yes O No

Thank you for your help!

Appendix C: Monthly Operating Report (MOR)

MONTHLY OPERATIONS REPORT

JUNE 2022

sun tran

sun van

sun LINK

ON DEMAND

JUNE 2022 HIGHLIGHTS

SAFETY AWARDS

RATP Dev recognized five exceptional operators with distinguished safety awards:

Sun Tran Coach Operators Michael Ross and Carol Barry, Sun Van Operator Timothy Grant and Sun Link Streetcar Operators Kim Estrada and Felix Morelos.

Sun Tran presented safety awards and bonuses to more than 370 employees who met a set of driving and safety record criteria in 2021. Sun Van honored 83 operators for having no preventable accidents or unsafe work practices.











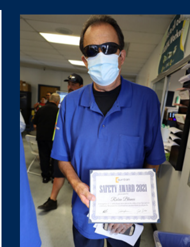











TPD PARTNERSHIP

Sun Tran provided a 40-foot bus for a field training exercise conducted by the Tucson Police Department at the local Public Safety Academy.

ELECTRIC BUS DELIVERY

An electric bus delivery completed Sun Tran's five-bus order with manufacturer Gillig. Sun Tran now has 10 all-electric buses. Since implementation of alternative fuel electric buses in September of 2021, Sun Tran has averted more than 2,500 gallons of diesel.

HUMAN TRAFFICKING AWARENESS

Sun Tran is taking a stand against human trafficking with the implementation of the #WeSeeYou awareness campaign. This initiative offers help to potential victims and educates transit workers, along with the public, on ways to recognize and report human trafficking in Tucson. The Federal Transit Administration (FTA) awarded Sun Tran $221,100 in grant funds in 2020 for public safety initiatives, including human trafficking awareness and training opportunities.
To learn more, visit SunTran.com/we-see-you.

QUANTUM SURVEY

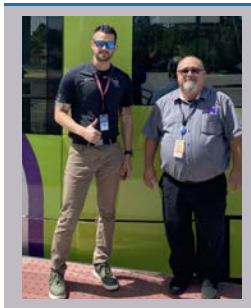
Riders using mobility devices can now enjoy an enhanced experience on Sun Tran buses. Quantum Automatic Securement Stations are currently available in 79 buses, or 40 percent of the active fleet. These new stations can be used instead of the strap system to secure mobility devices.
Researchers from the University of Arizona created a survey about the technology that riders can take online now through the end of September. The survey is offered in both English and Spanish and can be accessed at: SunTran.com/Quantum.

FARES

The Tucson Mayor and Council voted to extend free transit fares through the end of the calendar year. City leaders are gathering system data, transit agency comparisons and public input in preparation for their next fare-related vote. Sun Tran in collaboration with the City of Tucson is hosting a series of public input meetings and conducting a fares survey to give folks the opportunity to provide feedback.

RAIL CONFERENCE

The APTA Rail Conference held in San Diego, California in June invited Sun Link Operations Manager Nelson Hall to speak alongside Marwan Al-Mukhtar, a representative from DC Streetcar. The duo focused on fare-free systems during the presentation at the Streetcar Subcommittee meeting.



TEMPE STREETCAR TOUR

Sun Link Operations Manager Nelson Hall, Lead Streetcar Technician Carlos Perez, and Rail Supervisors Ray Tautimer and Vicki Platt visited Tempe to tour the Valley Metro rail facility. The transit system just launched its first streetcar, which services three miles of rail near downtown Tempe and the Arizona State University campus. Sun Link staff learned about industry advancements, shared operational knowledge with Valley Metro workers and showed support to onsite staff as they gear up for a busy fall.

STREETCAR TOUR

Twenty members of Project Amor and 13 staff were given a guided tour on the Sun Link streetcar. The group learned about the system by riding the entire route then stopping at the streetcar maintenance facility for a behind the scenes look at Sun Link operations.

SAFETY MEETINGS

Sun Tran Coach Operators attended safety meetings that included education about the Quantum Automatic Securement Stations, traditional wheelchair securement procedures, safe driving principles, verbal communication strategies and situational awareness tactics by employing the "OHNO" method of observing, initiating a hello, navigating risks and obtaining help.

BEACON TRAINING

Sun Van Supervisor Deiter Taylor and Sun Tran Community Outreach Manager, Luz Navarrete, conducted a transit training with ten Beacon Group clients. The participants learned about transit options for getting around Tucson and were also able to explore a Sun Tran bus. Later in the month, 30 Beacon Group clients who had previously participated in the training put their knowledge to the test by hopping on a Sun Tran bus. Assisted by Sun Van Supervisor Otha Taylor and Navarrete, the group traveled from the Beacon's headquarters to the Tohono transit center. The group identified various landmarks along the route during an educational game of bus bingo.

All Sun Tran employees learn the Run, Hide, Fight technique during the onboarding process. In June, 94 administrative employees, supervisors and maintenance staff received refresher training on the method, which is used for surviving an active shooter scenario or similar crisis. Staff watched an informative video produced by the FBI as part of ongoing education for crisis response.

NEW HIRES

SUN TRAN	SUN VAN	SUN LINK
2 - Coach Operators	11 - Van Operators	2 - Streetcar Operators
2 - Service Island Attendants	1 - Dispatcher	
1 - Supervisor/Dispatch		
1 - Parts Clerk		

SUN TRAN PROMOTIONS:

6 - Students to Full time Coach Operator

1 - Service Island to Custodian

PAVEMENT REPAIR

Crews repaired cracked and uneven pavement due to exposed tree roots at the south end of the Ronstadt Transit Center, eliminating trip hazards.

sun tran +12%

Year to Year Ridership

June 2022 - 1,076,142

June 2021 - 956,625

92%
On Time Performance

21
Passengers per Hour

13 Customer Compliments

sun LINK +38%

Year to Year Ridership

June 2022 - 58,624

June 2021 - 42,507

28
Passengers per Hour

96%
On Time Performance

sun van +14%

Year to Year Ridership

June 2022 - 36,466

June 2021 - 31,872

2
Passengers per Hour

88%
On Time Performance

ON DEMAND +110%

Year to Year Ridership

June 2022 - 734

June 2021 - 349

92%
On Time Performance

Sun Family All-Stars

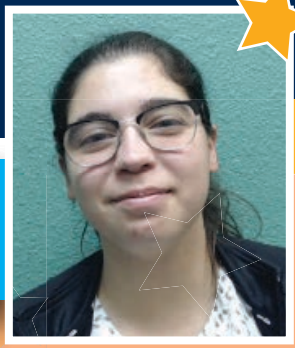
We like to recognize our employees who go the extra mile to help our passengers become ***Raving Fans.***

Efrain Espinoza-Casillas
Sun Tran Coach Operator

"Efrain is very caring, professional and cordial to all passengers. He is an outstanding hire."

Madison Lucas
Sun Van Reservationist

"Madison was so kind, bubbly and wonderful. I was a first-time rider and Madison was so helpful."

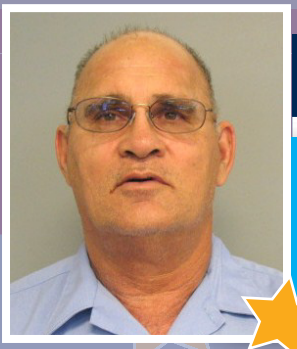


Latoya Moorehouse
Sun Tran Coach Operator

"I want to report the great job Latoya is doing. She is very polite, an excellent driver and has a great personality."

Robert Block
Sun Tran Coach Operator

"I left my bag on the bus with important items in it. When I went back, it was still there and I explained to the driver what I was dealing with. He took the time to speak with me and showed there is some good out there. He treated me with human respect and care. Thank you."

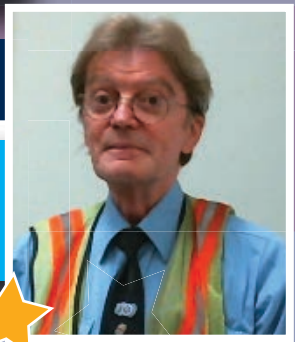


Cornelius Graeve
Sun Tran Coach Operator

"He is a saint. Cornelius waited a minute for me to reach the stop so I wouldn't miss the bus. Thank you for being a great driver."

William Dost
Sun Tran Coach Operator

"William always thanks me for riding and is so helpful with the bike rack. He is always very courteous."



Sun Tran

SunLink

Sun Van

On Demand

Electric Bus

Sun Tran Appendix

Sun Link Appendix

Sun Van Appendix

Glossary of Terms

sun tran

System Summary

Month to Date 2022	June Current	Prior Year	Variance Amount	Variance Percent	June Budget	Variance Amount	Variance Percent
Ridership							
Total Route Passengers	1,076,142	956,625	119,517	12%	1,172,131	(95,989)	-8%
Revenue							
Total Route Passenger Revenue	$ -	$ -	$ -	0%	$ -	$ -	0%
Expenses							
Total Expenses	$ 9,063,155	$ 7,159,531	$ (1,903,624)	-27%	$ 7,348,464	$ (1,714,691)	-23%
Miles							
Revenue Miles	619,905	647,538	(27,634)	-4%	694,547	74,642	11%
Deadhead Miles	70,551	75,769	(5,217)	-7%	98,354	27,803	28%
Total Service Miles	690,456	723,307	(32,851)	-5%	792,901	102,445	13%
Non-Route Miles	22,378	16,165	6,213	38%	7,325	(15,053)	-206%
Total Miles	712,834	739,472	(26,638)	-4%	800,226	87,392	11%
Revenue Hours	51,537	53,696	(2,158)	-4%	57,611	6,074	11%
Service Hours	55,127	56,925	(1,799)	-3%	61,637	6,510	11%

Year to Date	June YTD Current	Prior Year	Variance Amount	Variance Percent	June YTD Budget	Variance Amount	Variance Percent
Ridership							
Total Route Passengers	13,042,145	10,894,760	2,147,385	20%	14,300,000	(1,257,855)	-9%
Revenue							
Total Route Passenger Revenue	$ -	$ 15,620	$ (15,620)	0%	$ -	$ -	0%
Expenses							
Total Expenses	$ 65,028,279	$ 62,507,386	$ (2,520,892)	-4%	$ 88,181,570	$ 23,153,291	26%
Miles							
Revenue Miles	7,533,020	7,902,895	(369,875)	-5%	8,310,464	777,444	9%
Deadhead Miles	904,226	1,021,323	(117,097)	-11%	1,170,180	265,954	23%
Total Service Miles	8,437,246	8,924,218	(486,972)	-5%	9,480,644	1,043,398	11%
Non-Route Miles	174,014	216,354	(42,341)	-20%	99,814	(74,200)	-74%
Total Miles	8,611,260	9,140,573	(529,313)	-6%	9,580,458	969,198	10%
Revenue Hours	631,290	669,345	(38,055)	-6%	632,993	1,703	0%
Service Hours	669,725	711,032	(41,307)	-6%	676,955	7,230	1%

Performance Indicators

	System Indicator	Current Month	Prior Year	FY22 YTD	FY21 YTD
1.	Ridership	1,076,142	956,625	13,042,145	10,894,760
2.	Passenger Revenue	$ -	$ -	$ -	15,620
3.	Passenger per Revenue Mile	1.74	1.48	1.73	1.38
4.	Passenger per Revenue Hour	20.88	17.82	20.66	16.28
5.	Revenue per Passenger				-
6.	Revenue per Revenue Mile				-
7.	Revenue per Revenue Hour	-	-	-	-
8.	Farebox Recovery Ratio	-	-	-	-
9.	Cost per Passenger	8.42	7.48	4.99	5.74
10.	Cost per Revenue Mile	14.62	11.06	8.63	7.91
11.	Cost per Revenue Hour	175.86	133.34	103.01	93.39
12.	Net Cost per Revenue Hour	175.86	133.34	103.01	93.36
13.	Miles Between Road Calls	16,754	18,501	20,358	22,909
14.	Miles Between Bus Inspections	1,076	5,878	5,475	5,846
15.	Vehicle Accidents per 100,000 Miles	0.42	0.69	0.60	1.23
16.	Complaints per 100,000 Passengers	22.95	31.05	23.95	29.72
17.	Vehicles Operated in Maximum Service	147	154	165	174

Route Performance

ROUTE	TOTAL ROUTE PASSENGERS	ROUTE REVENUE	TOTAL SERVICE MILES	TOTAL SERVICE HOURS	TOTAL COST ALLOCATION	NET COST PER REVENUE HOUR	PASSENGER PER REVENUE MILE	PASSENGER PER REVENUE HOUR	REVENUE PER REVENUE MILE	REVENUE PER REVENUE HOUR	SUBSIDY PER PASSENGER
1	29,374	-	19,540	3,065	$ 438,107	$ 254	1.62	17.00	$ -	$ -	$ 14.91
2	22,784	-	19,808	1,669	268,290	163	1.17	13.83	-	-	11.78
3	37,680	-	36,412	2,775	457,408	174	1.15	14.36	-	-	12.14
4	85,072	-	44,940	3,845	615,844	170	2.16	23.44	-	-	7.24
5	16,374	-	18,141	1,397	229,645	170	0.96	12.12	-	-	14.02
6	39,408	-	18,313	2,106	316,806	155	2.29	19.27	-	-	8.04
7	47,046	-	33,136	2,300	388,697	181	1.60	21.95	-	-	8.26
8	87,050	-	42,492	3,511	567,095	172	2.37	26.46	-	-	6.51
9	49,088	-	32,853	2,401	400,035	176	1.64	21.65	-	-	8.15
10	27,530	-	14,921	1,257	202,064	164	1.91	22.39	-	-	7.34
11	91,566	-	44,736	3,480	570,516	172	2.22	27.57	-	-	6.23
12	28,532	-	14,568	1,253	200,467	164	2.03	23.29	-	-	7.03
15	17,982	-	20,872	1,567	259,210	171	0.92	11.88	-	-	14.41
16	90,692	-	31,783	2,827	448,713	164	3.07	33.24	-	-	4.95
17	62,168	-	44,925	3,168	533,039	180	1.57	21.05	-	-	8.57
18	82,630	-	16,653	1,699	261,690	162	2.69	49.73	-	-	5.80
19	22,868	-	9,048	845	132,661	162	2.69	27.95	-	-	5.80
21	11,592	-	10,413	875	140,801	168	1.20	13.79	-	-	12.15
22	2,528	-	8,445	657	107,718	172	0.33	4.03	-	-	42.61
23	27,758	-	19,783	1,678	269,272	164	1.46	16.94	-	-	9.70
24	14,012	-	8,846	621	104,670	175	1.67	23.37	-	-	7.47
25	39,878	-	23,361	1,934	312,160	168	1.85	21.52	-	-	7.83
26	16,176	-	17,378	1,161	198,282	176	0.97	14.37	-	-	12.26
27	15,348	-	18,431	1,230	210,154	176	0.87	12.87	-	-	13.69
29	26,546	-	20,903	1,554	257,821	172	1.36	17.75	-	-	9.71
34	52,858	-	29,413	2,405	389,367	171	2.01	23.23	-	-	7.37
37	11,638	-	15,808	1,180	195,470	186	0.92	11.05	-	-	16.80
50	7,114	-	11,077	943	151,250	169	0.71	7.94	-	-	21.26
61	6,690	-	12,707	961	158,671	169	0.54	7.12	-	-	23.72
Total Non-Express Route	1,069,982	-	659,711	54,364	8,785,923	173	1.77	21.10	-	-	8.21

ROUTE	TOTAL ROUTE PASSENGERS	ROUTE REVENUE	TOTAL SERVICE MILES	TOTAL SERVICE HOURS	TOTAL COST ALLOCATION	NET COST PER REVENUE HOUR	PASSENGER PER REVENUE MILE	PASSENGER PER TRIP	REVENUE PER REVENUE MILE	REVENUE PER REVENUE HOUR	SUBSIDY PER PASSENGER
101X	968	$ -	2,889	120	$ 24,055	$ 490	0.84	11.00	$ -	$ -	$24.85
102X	462	-	1,829	82	15,965	367	0.45	10.50	-	-	34.56
103X	242	-	1,174	76	13,113	235	0.31	5.50	-	-	54.19
104X	374	-	1,388	47	10,284	454	0.58	8.50	-	-	27.50
105X	462	-	1,368	83	14,604	289	0.71	10.50	-	-	31.61
107X	484	-	2,052	109	19,941	223	0.30	5.50	-	-	41.20
108X	440	-	1,607	81	15,136	468	0.82	10.00	-	-	34.40
109X	286	-	1,483	84	15,031	384	0.51	6.50	-	-	52.55
110X	462	-	1,940	63	13,956	302	0.29	5.25	-	-	30.21
201X	704	-	4,545	196	38,733	356	0.30	8.00	-	-	55.02
203X	506	-	5,849	219	45,706	338	0.15	5.75	-	-	90.33
204X	770	-	6,629	239	50,708	337	0.21	5.83	-	-	65.86
Total Express Route	6,160	-	32,752	1,399	277,232	337	0.34	7.37	$ -	$ -	$ 45.01
Total Service	1,076,142	-	692,462	55,763	9,063,155	$ 175.86	1.73		$ -	$ -	$ 8.42

Route Productivity By Route

Rank	Route Number	Route Description	Passengers per Hour
1	18	S. 6TH AVENUE	49.7
2	16	ORACLE / INA	33.2
3	19	STONE	28.0
4	11	ALVERNON	27.6
5	8	BROADWAY	26.5
6	4	SPEEDWAY	23.4
7	24	12TH AVENUE	23.4
8	12	10TH / 12TH AVENUE	23.3
9	34	CRAYCROFT / FT LOWELL	23.2
10	10	FLOWING WELLS	22.4
11	7	22ND STREET	21.9
12	9	GRANT ROAD	21.6
13	25	S. PARK AVENUE	21.5
14	17	COUNTRY CLUB / 29TH STREET	21.0
15	6	EUCLID/ NORTH FIRST AVENUE	19.3
16	29	VALENCIA	17.7
17	1	GLENN/SWAN	17.0
18	23	MISSION ROAD	16.9
19	26	BENSON HIGHWAY	14.4
20	3	6TH STREET / WILMOT	14.4
21	2	CHERRYBELL	13.8
22	21	WEST CONGRESS / SILVERBELL	13.8
23	27	MIDVALE PARK	12.9
24	5	PIMA STREET / WEST SPEEDWAY	12.1
25	15	CAMPBELL AVENUE	11.9
26	37	PANTANO	11.0
27	50	AJO	7.9
28	61	LA CHOLLA	7.1
29	22	GRANDE	4.0
		FIXED ROUTE SYSTEM AVERAGE	**21.1**

Rank	ROUTE NUMBER	ROUTE DESCRIPTION	PASSENGERS PER TRIP
1	101X	GOLF LINKS EXPRESS	11.0
2	104X	mayANA EXPRESS	8.9
3	103X	OLDFATHER EXPRESS	6.3
4	204X	NW / AEROPARK EXPRESS	6.1
5	201X	SPEEDWAY/AEROPARK EXPRESS	6.0
6	203X	ORO VALLEY/AEROPARK EXPRESS	6.0
7	108X	BROADWAY EXPRESS	5.8
8	102X	INA ROAD EXPRESS	4.7
9	105X	SUNRISE EXPRESS	4.7
10	107X	ORO VALLEY/DOWNTOWN EXPRESS	4.7
11	110X	RITA RANCH/DOWNTOWN EXPRESS	4.7
12	109X	TANQUE VERDE EXPRESS	4.5
		EXPRESS ROUTE SYSTEM AVERAGE	**6.1**

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System Summary

Month to Date	June		Variance		June	Variance	
	2022 Current	Prior Year	Amount	Percent	Budget	Amount	Percent
Ridership							
Total Route Passengers	58,624	42,507	16,117	37.9%	39,000	19,624	50.3%
Revenue							
Total Route Passenger Revenue	$ -	$ -	$ -	0.0%	$ -	$ -	0.0%
Expenses							
Total Expenses	$ 537,623	$ 464,739	$ 72,884	15.7%	$ 382,552	$ 155,071	40.5%
Miles							
Revenue Miles	16,245	17,221	(976)	-5.7%	16,618	(373)	-2.2%
Deadhead Miles	240	240	0	0.0%	240	0	0.0%
Total Service Miles	16,485	17,461	(976)	-5.6%	16,858	(373)	-2.2%
Revenue Hours	2,083	2,208	(125)	-5.7%	2,095	(12)	-0.6%

Year to Date	June YTD		Variance YTD		June YTD	Variance YTD	
	Current	Prior Year	Amount	Percent	Budget	Amount	Percent
Ridership							
Total Route Passengers	1,277,130	438,815	838,315	191.0%	741,736	535,394	72.2%
Revenue							
Total Route Passenger Revenue	$ -	$ -	$ -	0.0%	$ -	$ -	0.0%
Expenses							
Total Expenses	$ 4,352,715	$ 3,801,047	$ 551,668	14.5%	$ 4,593,613	$ (240,898)	-5.2%
Miles							
Revenue Miles	198,471	198,881	(410)	-0.2%	201,631	(3,160)	-1.6%
Deadhead Miles	2,920	2,920	0	0.0%	2,920	0	0.0%
Total Service Miles	201,391	201,801	(410)	-0.2%	204,551	(3,160)	-1.5%
Revenue Hours	25,444	25,496	(52)	-0.2%	25,060	384	1.5%

	System Indicator	Current Month	Prior Year	FY22 YTD	FY21 YTD
1.	Ridership	58,624	42,507	1,277,130	438,815
2.	Passengers per Revenue Mile	3.61	2.47	6.43	2.21
3.	Passengers per Revenue Hour	28.14	19.25	50.19	17.21
4.	Cost per Passenger	$ 9.17	10.93	$ 3.41	$ 9.54
5.	Cost per Revenue Mile	$ 33.09	26.99	$ 21.93	$ 19.08
6.	Cost per Revenue Hour	$ 258.10	210.48	$ 171.07	$ 148.85
7.	Miles Between Road Calls	N/A	N/A	N/A	N/A
8.	Miles Between Streetcar Inspection	930	964	950	909
9.	Total Preventable Accidents per 100,000 Miles	0	6	0	4
10.	Total Complaints per 100,000 Passengers	5	2	5	7

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System Summary

Month to Date		June		Variance		June	Variance	
	2022	Current Year	Prior Year	Amount	Percent	Budget	Amount	Percent
Ridership								
Total Demand		51,476	43,348	8,128	18.8%	57,660	(6,184)	-10.7%
Denials		-	-	-	0.0%	-	-	0.0%
Missed Trips		-	-	-	0.0%	-	-	0.0%
Cancellations		11,608	8,873	2,735	30.8%	10,880	728	6.7%
No Shows		3,402	2,603	799	30.7%	3,120	282	9.0%
Total Passengers		36,466	31,872	4,594	14.4%	43,660	(7,194)	-16.5%
ADA Passengers		34,501	30,151	4,350	14.4%			
Optional ADA		1,965	1,721	244	14.2%			
Percentage of Optional		5.4%	5.4%					
Trips								
ADA Trips		32,069	28,095	3,974	14.1%			
Optional ADA Trips		1,881	1,613	268	16.6%			
Total Trips		33,950	29,708	4,242	14.3%	40,570	(6,620)	-16.3%
Revenue								
Regular Fare Revenue		-	-	-	-	39,570	(39,570)	-100.0%
Economy Fare Revenue		-	-	-	-	50,180	(50,180)	-100.0%
Total Fares Collected		$ -	$ -	$ -	-	$ 89,750	$ (89,750)	-100.0%
Expenses								
Total Expenses		$ 2,565,271	$ 1,797,853	$ (767,417)	-42.7%	$ 1,588,904	$ 976,367	61.4%
Miles								
Revenue Miles		254,202	227,401	26,801	11.8%	289,160	(34,958)	-12.1%
Deadhead Miles		44,026	41,525	2,501	6.0%	64,210	(20,184)	-31.4%
Total Service Miles		298,228	268,926	29,302	10.9%	353,370	(55,142)	-15.6%
Non-Route Miles		5,480	4,367	1,113	25.5%	1,840	3,640	197.8%
Total Miles		303,708	273,293	30,415	11.1%	355,210	(51,502)	-14.5%
Revenue Hours		17,509	15,905	1,604	10.1%	21,240	(3,731)	-17.6%
Service Hours		20,130	18,382	1,748	9.5%	25,400	(5,270)	-20.7%

System Summary

Year to Date	June YTD		Variance		June YTD	Variance	
2022	Current Year	Prior Year	Amount	Percent	Budget	Amount	Percent
Ridership							
Total Demand	589,287	406,977	182,310	44.8%	731,770	(142,483)	-19.5%
Denials	-	-	-	0.0%	-	-	0.0%
Missed Trips	12	2	10	500.0%	-	12	0.0%
Cancellations	133,543	94,384	39,159	41.5%	138,050	(4,507)	-3.3%
No Shows	38,231	25,131	13,100	52.1%	39,610	(1,379)	-3.5%
Total Passengers	417,501	287,460	130,041	45.2%	554,110	(136,609)	-24.7%
ADA Passengers	394,374	271,451	122,923	45.3%			
Optional ADA	23,127	16,009	7,118	44.5%			
Percentage of Optional	5.5%	5.6%					
Trips							
ADA Trips	367,259	251,760	115,499	45.9%			
Optional ADA Trips	22,017	14,858	7,159	48.2%			
Total Trips	389,276	266,618	122,658	46.0%	516,380	(127,104)	-24.6%
Revenue							
Regular Fare Revenue	-	-	-	0.0%	496,850	(496,850)	-100.0%
Economy Fare Revenue	-	-	-	0.0%	642,960	(642,960)	-100.0%
Total Fares Collected	$ -	$ -	$ -	0.0%	$ 1,139,810	$ (1,139,810)	-100.0%
Expenses							
Total Expenses	$ 16,389,005	$ 13,783,104	$ (2,605,901)	-18.9%	$ 18,001,700	$ (1,612,695)	-9.0%
Miles							
Revenue Miles	2,928,908	2,194,446	734,462	33.5%	3,718,870	(789,962)	-21.2%
Deadhead Miles	523,132	448,854	74,278	16.5%	783,110	(259,978)	-33.2%
Total Service Miles	3,452,041	2,643,301	808,740	30.6%	4,501,980	(1,049,939)	-23.3%
Non-Route Miles	51,308	45,382	5,926	13.1%	22,080	29,228	132.4%
Total Miles	3,503,349	2,688,683	814,666	30.3%	4,524,060	(1,020,711)	-22.6%
Revenue Hours	206,052	160,549	45,503	28.3%	279,520	(73,468)	-26.3%
Service Hours	235,946	189,435	46,511	24.6%	329,510	(93,564)	-28.4%

Performance Indicators

	System Indicator	Current Month	Prior Year	FY22 YTD	FY21 YTD
1.	Ridership	36,466	31,872	417,501	287,460
2.	Demand	51,476	43,348	589,287	406,977
3.	Cancellations	11,608	8,873	133,543	94,384
4.	No-Shows	3,402	2,603	38,231	25,131
5.	Passengers per Revenue Hour	2.08	2.00	2.03	1.79
6.	Passengers per Service Hour	1.81	1.73	1.77	1.52
7.	Revenue per Trip	$ -	$ -	$ -	$ -
8.	Cost per Trip	$ 75.56	$ 60.52	$ 42.10	$ 51.70
9.	Vehicles Operated in Maximum Service	93	82	94	83
10.	Trip Time,Sun Tran	81.23%	87.91%	82.22%	88.66%
11.	Trip Time 110% + 5 Minutes	89.07%	93.24%	89.60%	93.29%
12.	Pick-Ups	85.05%	93.60%	87.65%	95.92%
13.	Pick-Ups Before Significantly Late	98.95%	99.93%	99.33%	99.97%

ON DEMAND

Month to Date	June		Variance	
2022	Current Year	Prior Year	Amount	Percent
Ridership				
Total Demand	991	438	553	126.3%
Denials	-	-	-	0.0%
Missed Trips	-	-	-	0.0%
Cancellations	230	72	158	219.4%
No Shows	27	17	10	58.8%
Total Passengers	734	349	385	110.3%
Trips				
Total Trips	649	320	329	102.8%
Revenue				
Regular Fare Revenue	-	-	-	-
Economy Fare Revenue	-	-	-	-
Total Fares Collected	$ -	$ -	$ -	-
Miles				
Revenue Miles	3,254	1,219	2,035	166.9%
Deadhead Miles	782	1,963	(1,181)	-60.2%
Total Service Miles	4,036	3,182	854	26.8%
Non-Route Miles	-72	415	(487)	-117.3%
Total Miles	3,964	3,597	367	10.2%
Revenue Hours	368	364	4	1.1%
Service Hours	472	612	(140)	-22.9%

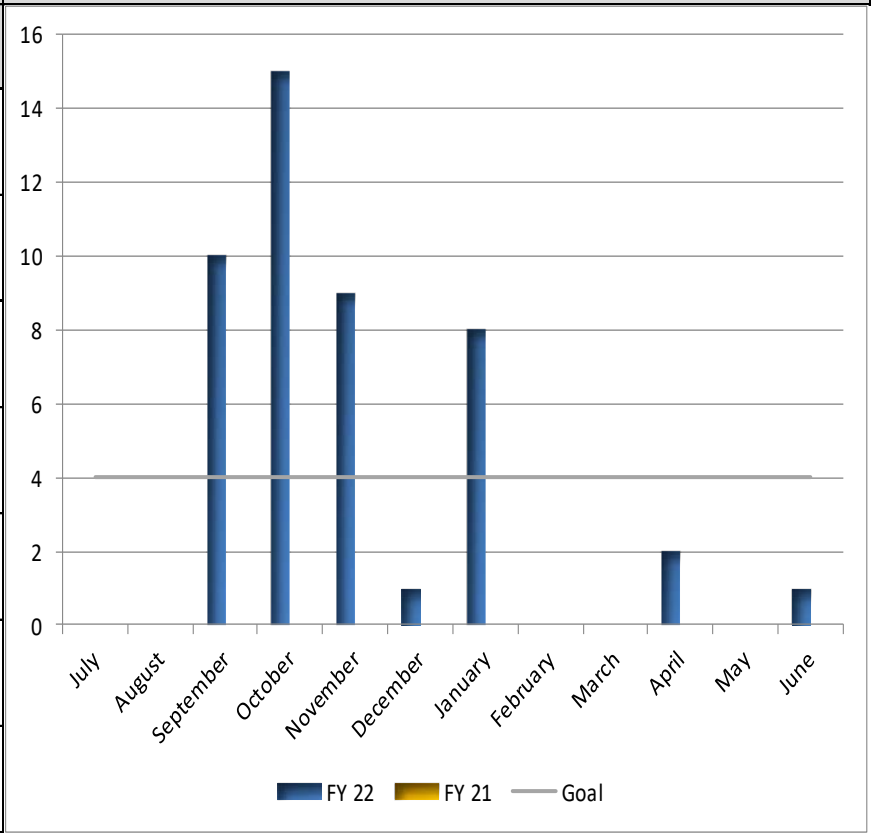
System Summary

Year to Date	June YTD		Variance	
2022	Current Year	Prior Year	Amount	Percent
Ridership				
Total Demand	9,494	4,640	4,854	104.6%
Denials	-	-	-	0.0%
Missed Trips	-	-	-	0.0%
Cancellations	2,115	628	1,487	236.8%
No Shows	390	263	127	48.3%
Total Passengers	6,989	3,749	3,240	86.4%
Trips				
Total Trips	5,833	3,532	2,301	65.1%
Revenue				
Regular Fare Revenue	-	-	-	0.0%
Economy Fare Revenue	-	-	-	0.0%
Total Fares Collected	$ -	$ -	$ -	0.0%
Expenses				
Total Expenses	$ -	$ -	$ -	0.0%
Miles				
Revenue Miles	29,280	16,635	12,646	76.0%
Deadhead Miles	7,831	16,531	(8,700)	-52.6%
Total Service Miles	37,112	33,166	3,945	11.9%
Non-Route Miles	8,761	7,021	1,740	24.8%
Total Miles	45,873	40,187	5,686	14.1%
Revenue Hours	3,768	2,603	1,165	44.8%
Service Hours	6,323	5,679	645	11.4%

*Passengers reported in the April MOR were overstated, a correction has been made and is reflected in YTD total Passengers.

Customer Service Calls/E-Mails Received	
June 2022	
Total Calls/E-mails Received	1
Inquiries	1
Compliments	0
Complaints	0
Non-Chargeable	0
Chargeable	0
Pending/Incomplete	0

Total Complaints per 10,000 Passengers



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4015
ZERO EMISSIONS
USDOT 2195835
Cleaner
Greener
Community
TEP
All Electric

Month to Date 2022	Month to Date Current	Prior Year	Variance Amount	Variance Percent	Month to Date Budget	Variance Amount	Variance Percent
Expenses							
Parts	-						
Electricity	-						
Total Expenses	$ -						
Miles							
Total Miles	10,503						
KWH	44,585						

**The calculation for cost is still an open item with TEP.

Year to Date	Year to Date Current	Prior Year	Variance Amount	Variance Percent	Year to Date Budget	Variance Amount	Variance Percent
Expenses							
Parts	14,938						
Electricity	2,430						
Total Expenses	17,368						
Miles							
Total Miles	26,899						
KWH	92,201						

Appendices – Additional Data

A. Sun Tran

B. Sun Link

C. Sun Van

D. Glossary

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Ridership

Month to Date	June		Variance		June	Variance	
2022	Current	Prior Year	Amount	Percent	Budget	Amount	Percent
Total Passengers	**1,076,142**	**956,625**	**119,517**	**12.5%**	**1,191,667**	**(115,525)**	**-9.7%**

Month to Date	Calendar Days		School Days			Average Route Ridership	
	Current	Prior Year	Current	Prior Year		Current	Prior Year
Weekdays	22	22	Current	Prior Year	Weekdays	41,779	37,024
Saturdays	4	4	0	0	Saturdays	22,977	20,102
Sundays	4	4			Sundays	16,274	15,421
Holidays	0	0			Holidays	-	-
Total	30	30			Total	36,598	31,888

Year to Date	June YTD		Variance		June YTD	Variance	
	Current	Prior Year	Amount	Percent	Budget	Amount	Percent
Total Passengers	**13,042,145**	**10,894,760**	**2,147,385**	**19.7%**	**14,300,000**	**(1,257,855)**	**-8.8%**

Year to Date	Calendar Days		School Days			Average Route Ridership	
	Current	Prior Year	Current	Prior Year		Current	Prior Year
Weekdays	256	256	187	183	Weekdays	43,008	35,384
Saturdays	51	51			Saturdays	22,583	19,596
Sundays	52	52			Sundays	16,374	14,616
Holidays	6	6			Holidays	11,812	12,953
Total	365	365			Total	35,732	29,849

Annual Ridership

Current Year	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	YTD FY 2022
Fixed Routes	1,098,929	1,266,795	1,104,679	1,066,594	1,053,006	972,004	1,017,665	994,332	1,122,563	1,092,785	1,128,930	1,069,982	12,988,264
Express Routes	3,759	4,334	4,326	4,179	4,190	3,717	3,927	4,240	5,221	5,166	4,662	6,160	53,881
Total	**1,102,688**	**1,271,129**	**1,109,005**	**1,070,773**	**1,057,196**	**975,721**	**1,021,592**	**998,572**	**1,127,784**	**1,097,951**	**1,133,592**	**1,076,142**	**13,042,145**

Previous Year	July 2020	August 2020	September 2020	October 2020	November 2020	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	June 2021	YTD FY 2021
Fixed Routes	792,339	790,413	784,754	955,733	915,496	946,637	858,124	879,253	1,011,040	1,000,606	961,473	951,304	10,847,172
Express Routes	3,902	3,591	3,638	5,119	2,519	2,896	3,253	3,854	4,129	4,501	4,865	5,321	47,588
Total	**796,241**	**794,004**	**788,392**	**960,852**	**918,015**	**949,533**	**861,377**	**883,107**	**1,015,169**	**1,005,107**	**966,338**	**956,625**	**10,894,760**

Variance	July	August	September	October	November	December	January	February	March	April	May	June	YTD FY 2022
Fixed Routes	306,590	476,382	319,925	110,861	137,510	25,367	159,541	115,079	111,523	92,179	167,457	118,678	2,141,092
Express Routes	(143)	743	688	(940)	1,671	821	674	386	1,092	665	(203)	839	6,293
Total	**306,447**	**477,125**	**320,613**	**109,921**	**139,181**	**26,188**	**160,215**	**115,465**	**112,615**	**92,844**	**167,254**	**119,517**	**2,147,385**

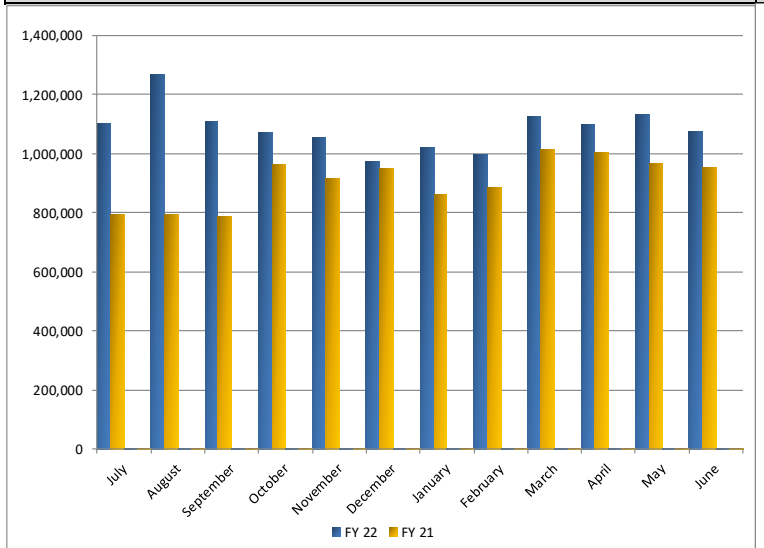
% Variance	July	August	September	October	November	December	January	February	March	April	May	June	YTD FY 2022
Fixed Routes	38.7%	60.3%	40.8%	11.6%	15.0%	2.7%	18.6%	13.1%	11.0%	9.2%	17.4%	12.5%	19.7%
Express Routes	-3.7%	20.7%	18.9%	-18.4%	66.3%	28.3%	20.7%	10.0%	26.4%	14.8%	-4.2%	15.8%	13.2%
Total	**38.5%**	**60.1%**	**40.7%**	**11.4%**	**15.2%**	**2.8%**	**18.6%**	**13.1%**	**11.1%**	**9.2%**	**17.3%**	**12.5%**	**19.7%**

Totals By:	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	YTD FY 2022
Weekday	896,973	1,079,298	936,789	882,903	894,285	832,650	849,681	841,900	972,532	920,808	940,086	919,138	10,967,043
Saturday	117,775	99,296	91,476	109,455	87,020	66,294	83,648	89,672	88,384	113,315	90,924	91,908	1,129,167
Sunday	65,955	92,535	64,592	78,415	64,684	62,952	76,710	67,000	66,868	63,828	82,805	65,096	851,440
Holiday	21,985		16,148		11,207	13,825	11,553				19,777		94,495
Total	**1,102,688**	**1,271,129**	**1,109,005**	**1,070,773**	**1,057,196**	**975,721**	**1,021,592**	**998,572**	**1,127,784**	**1,097,951**	**1,133,592**	**1,076,142**	**13,042,145**

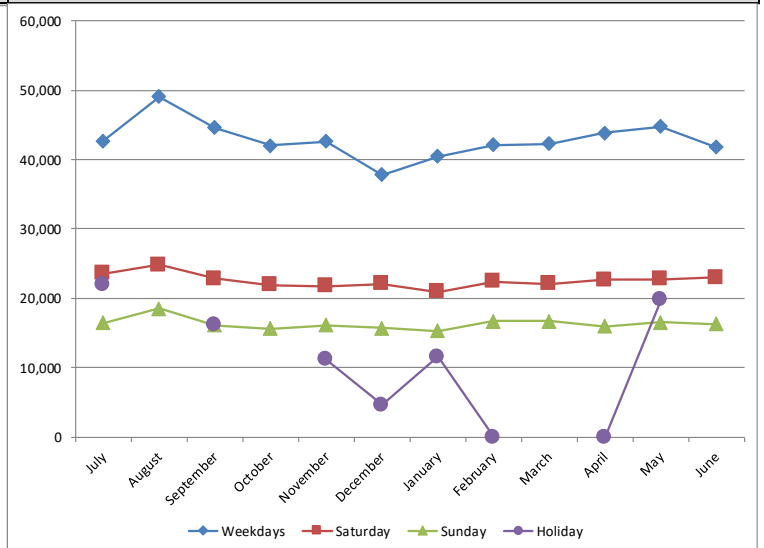
Averages By:	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	YTD FY 2022
Weekday	42,713	49,059	44,609	42,043	42,585	37,848	40,461	42,095	42,284	43,848	44,766	41,779	43,008
Saturday	23,555	24,824	22,869	21,891	21,755	22,098	20,912	22,418	22,096	22,663	22,731	22,977	22,583
Sunday	16,489	18,507	16,148	15,683	16,171	15,738	15,342	16,750	16,717	15,957	16,561	16,274	16,374
Holiday	21,985		16,148		11,207	4,608	11,553				19,777		11,812
Total	**35,571**	**41,004**	**36,967**	**34,541**	**35,240**	**30,491**	**32,955**	**35,663**	**36,380**	**36,598**	**35,567**	**35,871**	**35,732**

Ridership Charts

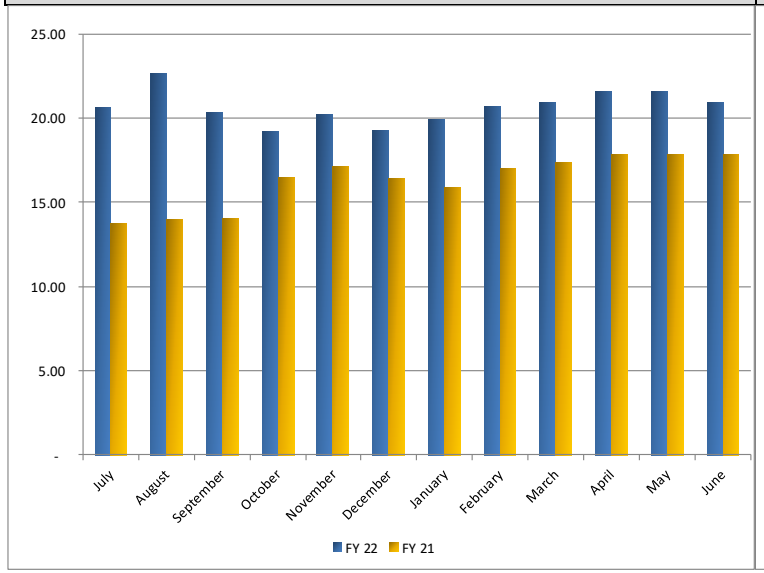
Total Ridership



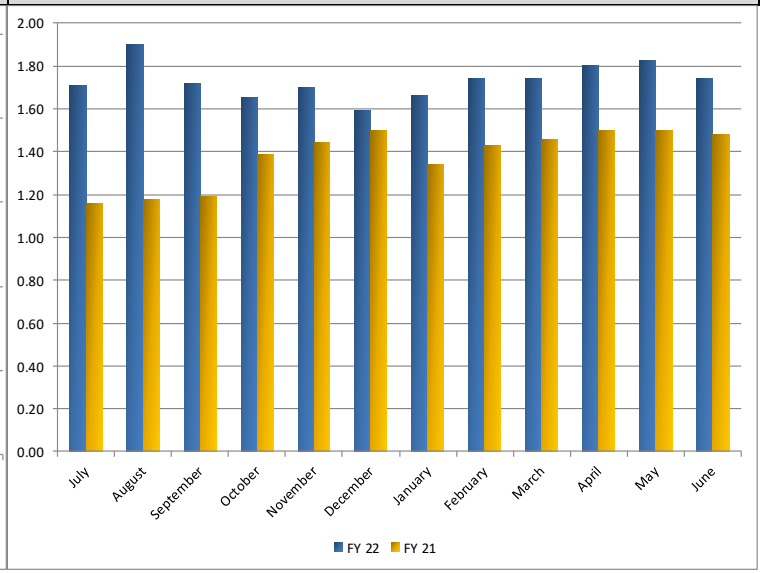
Average Ridership by Day



Passengers per Hour

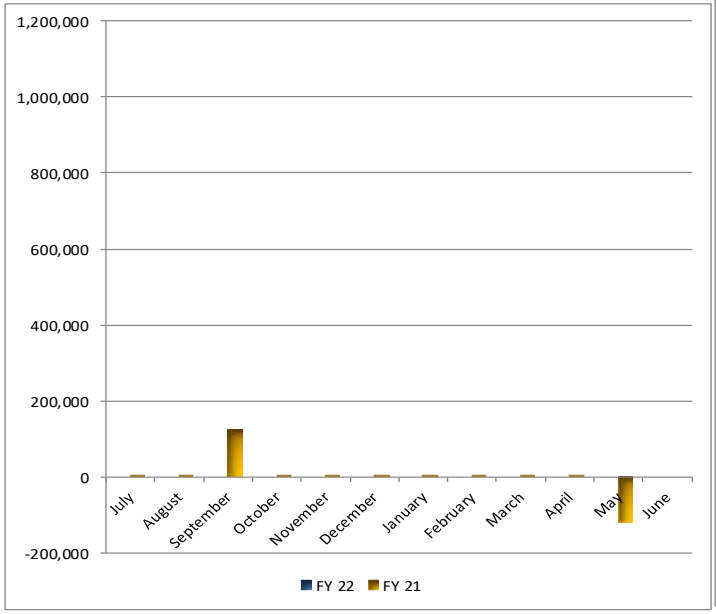


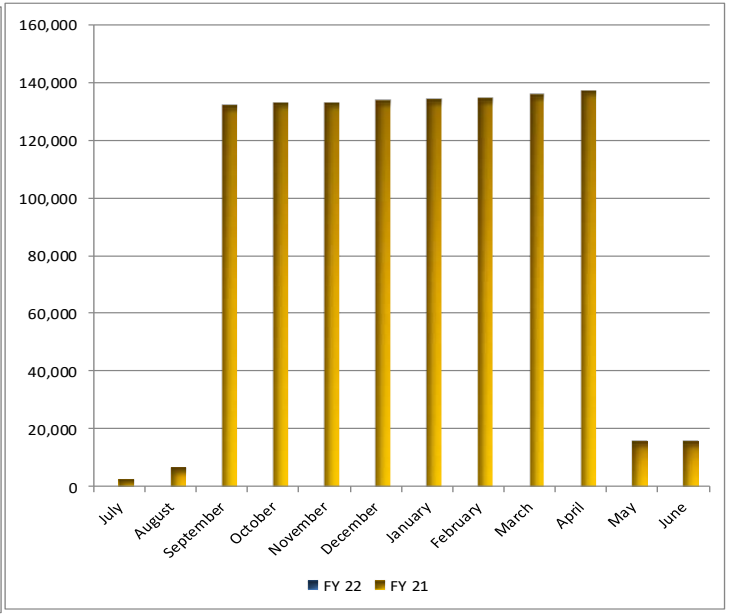
Passengers per Mile



Month to Date	June		Variance		June	Variance	
2022	Current	Prior Year	Amount	Percent	Budget	Amount	Percent
Route Passenger Revenue							
Full Fare	$ -		0	0.0%		-	0.00%
Economy Fare	-		0	0.0%		-	0.00%
Express Fare	-		0	0.0%		-	0.00%
Day Pass	-		0	0.0%		-	0.00%
Other	-		0	0.0%		-	0.00%
Route Passenger Revenue	$ -	-	**0**	**0.0%**	$ -	-	**0.00%**

Year to Date	June YTD		Variance		June YTD	Variance	
	Current	Prior Year	Amount	Percent	Budget	Amount	Percent
Route Passenger Revenue							
Full Fare	$ -	$ 9,208	(9,208)	0.0%		-	0.0%
Economy Fare	-	225	(225)	0.0%		-	0.0%
Express Fare	-	448	(448)	0.0%		-	0.0%
Day Pass	-	5,739	(5,739)	0.0%		-	0.0%
Other	-	-	0	0.0%		-	0.0%
Route Passenger Revenue	**$ -**	**$ 15,620**	**(15,620)**	**0.0%**	$ -	-	**0.0%**



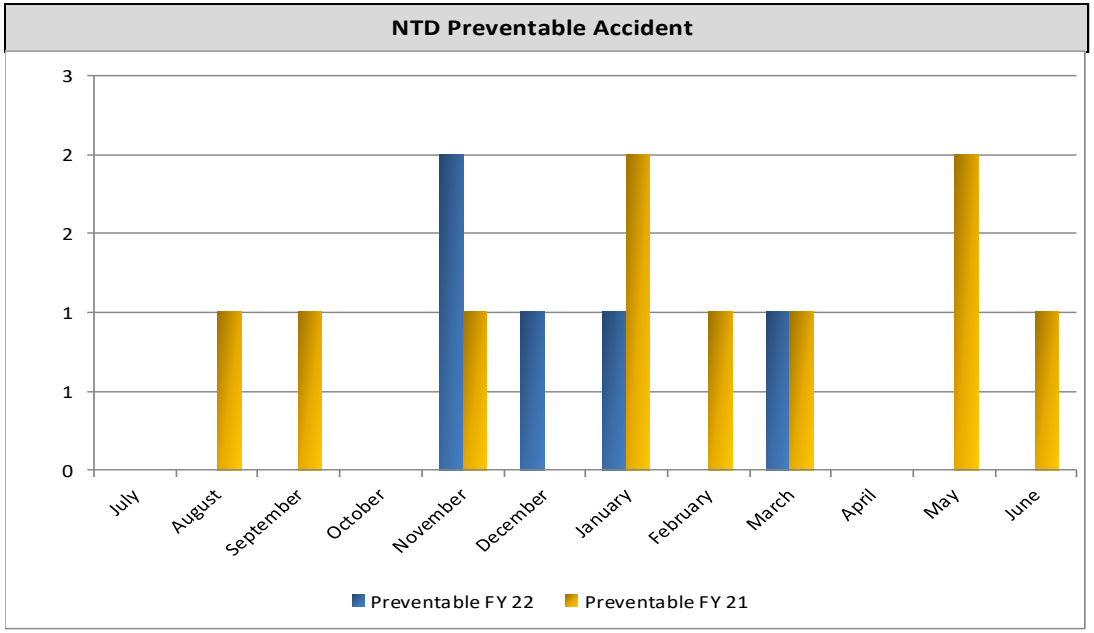


Expenses

Month to Date	June		Variance		Monthly	Variance	
2022	Current	Prior Year	Amount	Percent	Budget	Amount	Percent
Operator Wages	$ 2,230,279	$ 1,893,297	$ (336,982)	-18%	$ 1,497,428	$ (732,850)	-49%
Maintenance Wages	596,291	532,647	(63,644)	-12%	450,917	(145,374)	-32%
Salaries	611,589	513,033	(98,556)	-19%	459,668	(151,921)	-33%
Fringe Benefits	1,134,898	1,071,292	(63,606)	-6%	1,188,701	53,803	5%
Services	2,619,242	1,585,534	(1,033,707)	-65%	492,276	(2,126,966)	-432%
Utilities	161,098	78,114	(82,985)	-106%	99,500	(61,598)	-62%
Vehicle Maintenance	477,854	538,864	61,009	11%	541,500	63,646	12%
Materials and Supplies	200,021	496,293	296,272	60%	125,618	(74,403)	-59%
CNG Fuel	110,008	49,131	(60,876)	-124%	62,250	(47,758)	-77%
Diesel Fuel	877,078	272,589	(604,489)	-222%	351,720	(525,358)	-149%
Unleaded Fuel	18,879	10,161	(8,717)	-86%	12,875	(6,004)	-47%
Capital Outlay	42,740	100,745	58,005	247%	51,950	9,210	18%
Insurance	21,250	20,833	(417)	-2%	113,333	92,083	81%
Labor Credits/Expense Transfers	(38,071)	(3,002)	35,069	-1168%	1,900,728	1,938,799	102%
Total Expenses	**$ 9,063,155**	**$ 7,159,531**	**$ (1,903,623)**	**-26.6%**	**$ 7,348,464**	**$ (1,714,691)**	**-23.3%**

Year to Date	June YTD		Variance		Annual	Budget Balance	
	Current Year	Prior Year	Amount	Percent	Budget	Amount	Percent
Operator Wages	$ 20,154,575	$ 19,556,243	$ (598,332)	-3%	$ 17,969,140	$ (2,185,435)	-12%
Maintenance Wages	5,578,165	5,370,152	(208,012)	-4%	5,411,000	(167,165)	-3%
Salaries	5,544,486	5,531,432	(13,054)	0%	5,516,020	(28,466)	-1%
Fringe Benefits	13,665,062	13,230,185	(434,877)	-3%	14,264,410	599,348	4%
Services	6,727,412	6,122,896	(604,516)	-10%	5,907,310	(820,102)	-14%
Utilities	1,166,638	1,029,759	(136,879)	-13%	1,194,000	27,362	2%
Vehicle Maintenance	4,769,288	5,024,772	255,484	5%	6,498,000	1,728,712	27%
Materials and Supplies	827,554	1,296,227	468,673	36%	1,507,420	679,866	45%
CNG Fuel	956,300	609,662	(346,638)	-57%	747,000	(209,300)	-28%
Diesel Fuel	3,975,823	2,634,727	(1,341,096)	-51%	4,220,640	244,817	6%
Unleaded Fuel	150,148	90,037	(60,111)	-67%	154,500	4,352	3%
Capital Outlay	303,358	731,747	428,389	0%	623,400	320,042	51%
Insurance	1,303,267	1,302,417	(850)	0%	1,360,000	56,733	4%
Labor Credits/Expense Transfers	(93,797)	(22,870)	70,928	-310%	22,808,730	22,902,527	100%
Total Expenses	**$ 65,028,279**	**$ 62,507,386**	**$ (2,520,892)**	**-4.0%**	**$ 88,181,570**	**$ 23,153,291**	**26.3%**

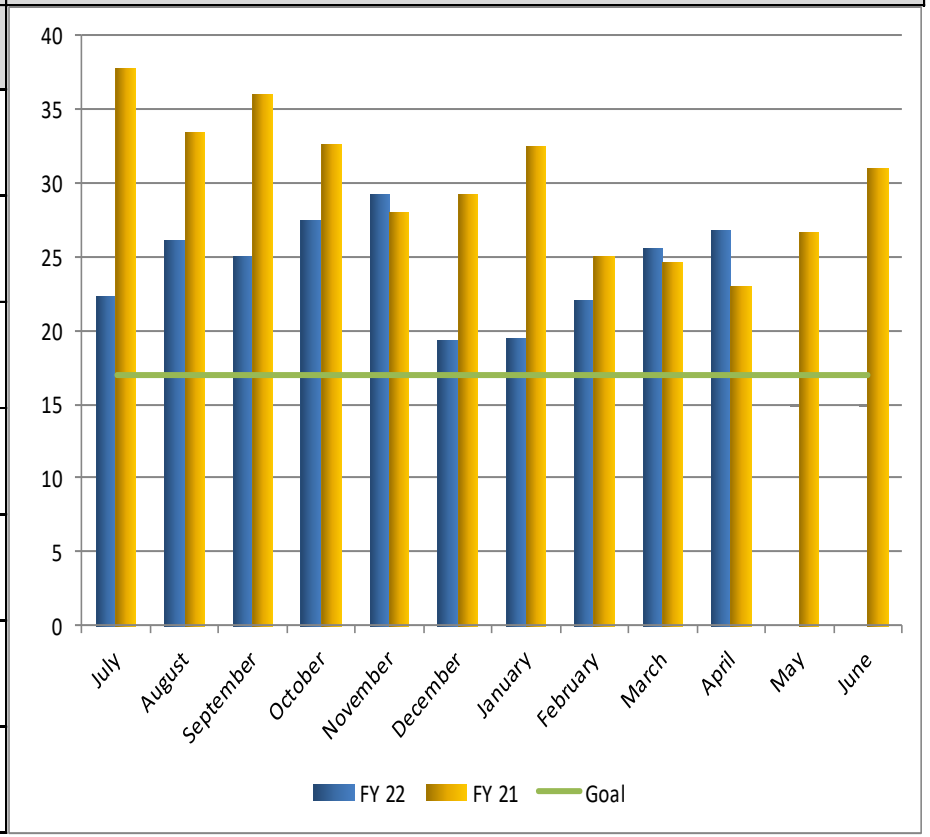
Accidents						
	FY 2022			FY 2021		
	Preventable	Non-Preventable	Total	Preventable	Non-Preventable	Total
July	0	5	5	0	1	1
August	0	8	8	1	2	3
September	0	1	1	1	4	5
October	0	4	4	0	4	4
November	2	3	5	1	2	3
December	1	4	5	0	3	3
January	1	4	5	2	4	6
February	0	0	0	1	4	5
March	1	4	5	1	8	9
April	0	5	5	0	3	3
May	0	5	5	2	2	4
June	0	3	3	1	3	4



*Note: Preventable accidents/incidents are defined by the contract between the City of Tucson and RATP Dev.

Customer Service Calls/E-Mails Received	
June 2022	
Total Calls/E-mails Received	293
Inquiries	29
Compliments	13
Complaints	247
Chargeable	67
Non-Chargeable	166
Pending/Incomplete	18

Total Complaints per 100,000 Passengers



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Month to Date	June 2022	Current	Prior Year	Variance Amount	Percent	June Budget	Variance Amount	Percent
Route Passengers		58,624	42,507	16,117	37.9%	39,000	19,624	50.3%

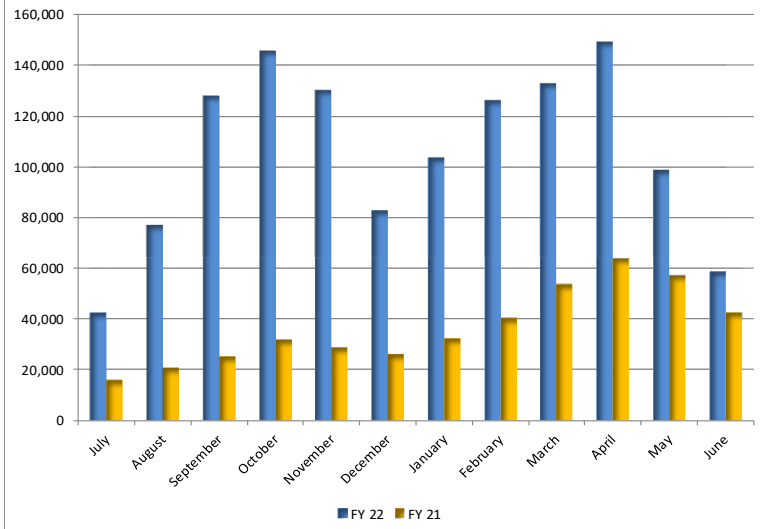
Month to Date	Current	Prior Year	School Days Current	School Days Prior Year		Average Route Ridership Current	Average Route Ridership Prior Year
Weekdays	22	22	0	0	Weekdays	2,148	1,537
Weekends	8	8			Weekends	1,422	1,086
Holidays	0	0			Holidays		
Total	30	30			Total	1,954	1,417

Year to Date	June YTD Current	June YTD Prior Year	Variance Amount	Percent	June YTD Budget	Variance Amount	Percent
Route Passengers	1,277,130	438,815	838,315	191.0%	741,736	535,394	72.2%

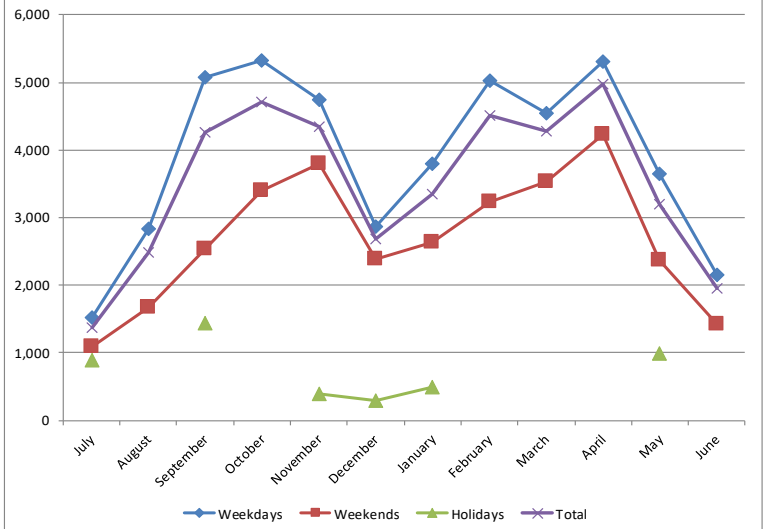
Year to Date	Calendar Days Current	Calendar Days Prior Year	School Days Current	School Days Prior Year		Average Route Ridership Current	Average Route Ridership Prior Year
Weekdays	257	255	157	174	Weekdays	3,884	1,280
Weekends	102	104			Weekends	2,691	1,060
Holidays	6	6			Holidays	747	384
Total	365	365			Total	3,499	1,202

Ridership Charts

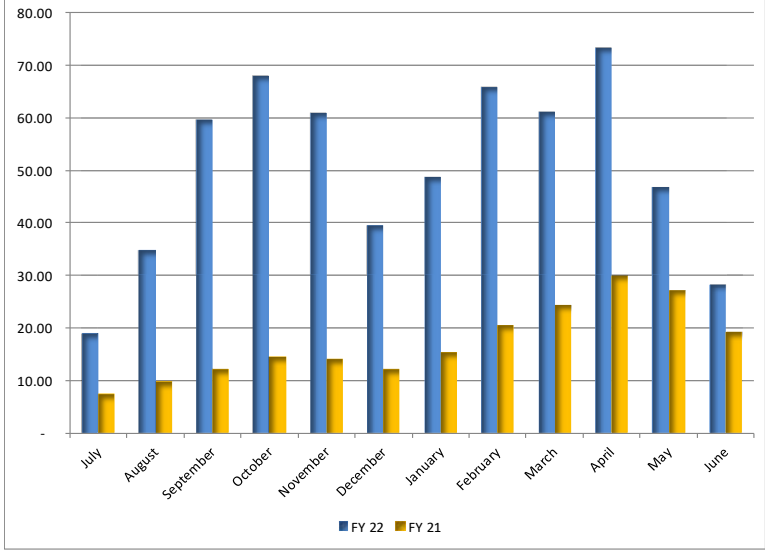
Total Ridership



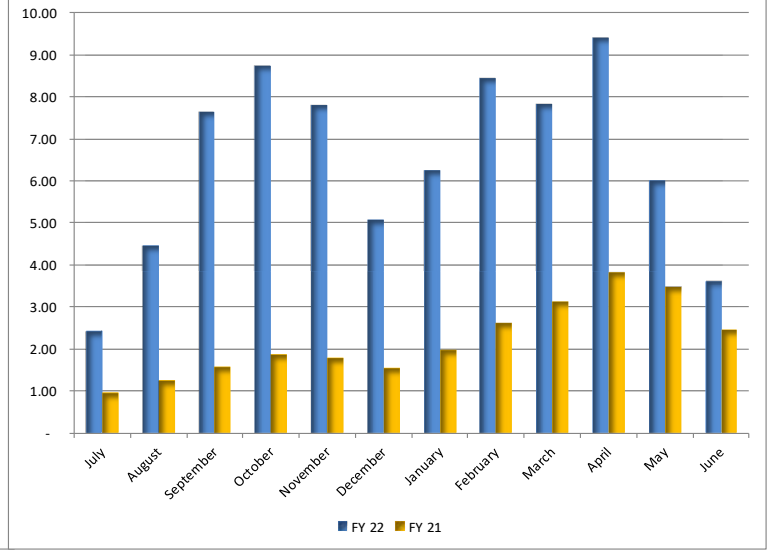
Average Ridership by Day



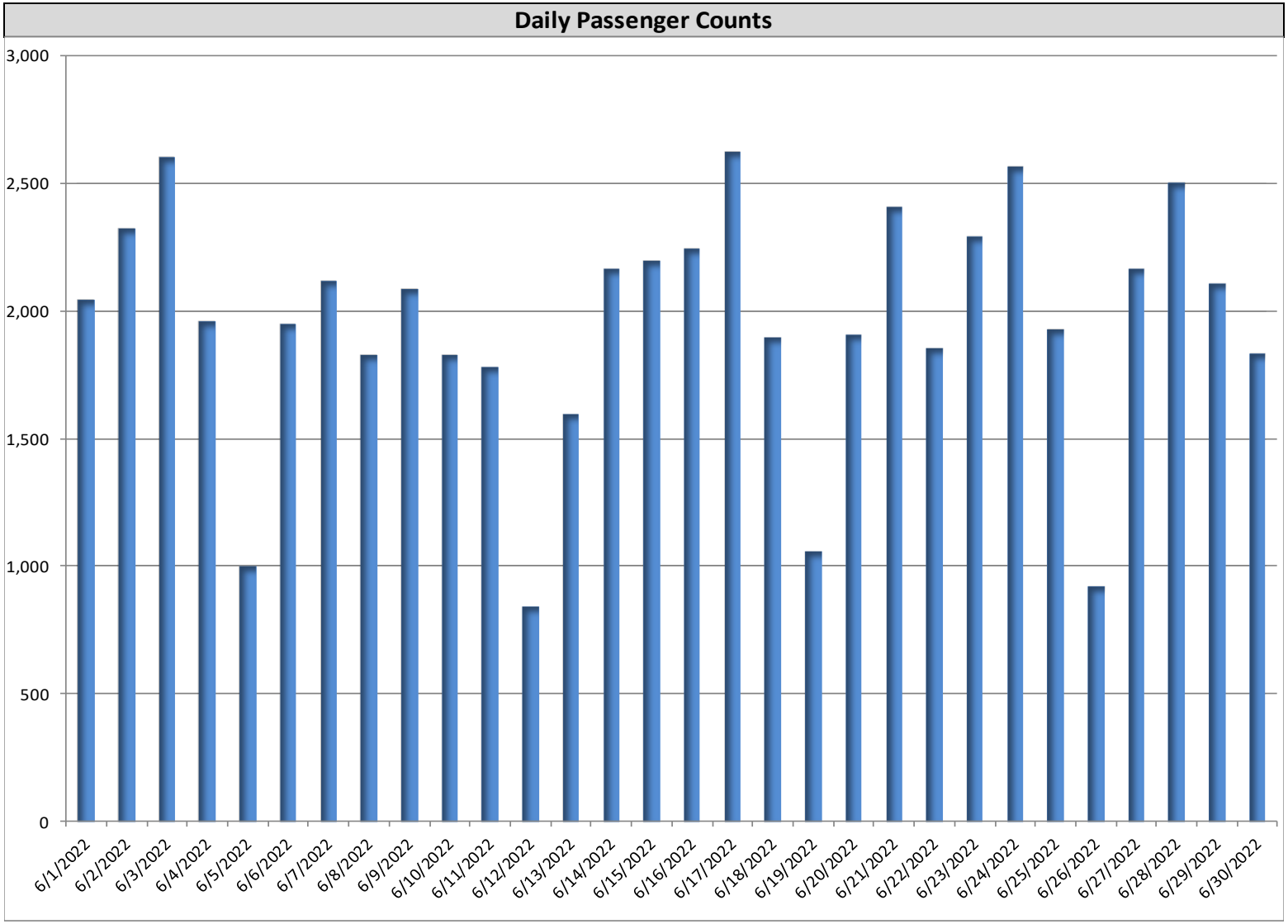
Passengers per Revenue Hour



Passengers per Revenue Mile



Daily Passenger Counts

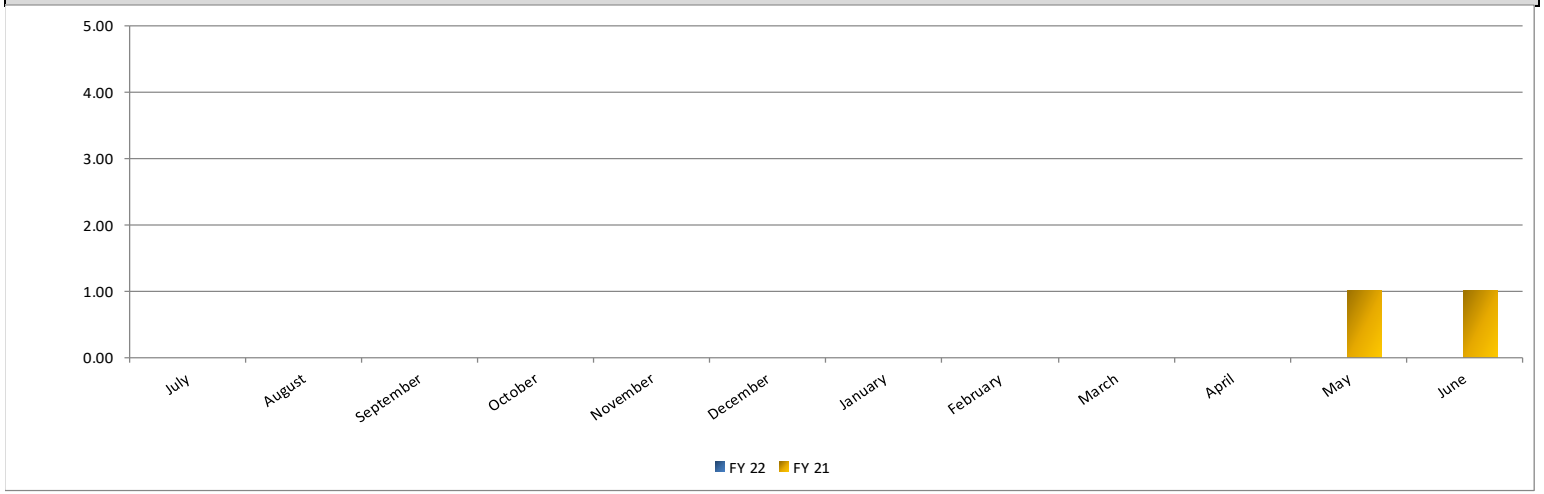


Month to Date June 2021	Current	Prior Year	Variance Amount	Percent	Monthly Budget	Variance Amount	Percent
Contracts	$ 64,301	$ 61,839	$ (2,462)	-4.0%	$ 20,833	$ (43,468)	-208.6%
Administration Wages	83,896	77,041	(6,856)	-8.9%	25,274	(58,622)	-231.9%
Maintenance Wages	37,624	24,568	(13,056)	-53.1%	28,616	(9,008)	-31.5%
Operations Wages	84,178	72,098	(12,080)	-16.8%	90,361	6,183	6.8%
Fringe Benefits	40,717	52,309	11,592	22.2%	46,374	5,657	12.2%
Taxes	-	-	-	0.0%	-	-	0.0%
Staffing Costs	-	-	-	0.0%	167	167	100.0%
Supplies	42,326	8,515	(33,811)	-397.1%	7,093	(35,233)	-496.7%
Information Technology	11,849	949	(10,900)	-1148.6%	5,917	(5,932)	-100.3%
Maintenance Supplies	63,521	39,019	(24,502)	-62.8%	31,850	(31,671)	-99.4%
NRV Maintenance	140	162	22		1,667	1,527	91.6%
Fuel	1,020	696	(324)	-46.5%	625	(395)	-63.2%
Utilities	30,628	29,334	(1,294)	-4.4%	34,158	3,530	10.3%
Public Education/Marketing	3,250	4,724	1,474		5,492	2,242	40.8%
Miscellaneous	74,172	93,485	19,312	20.7%	84,125	9,953	11.8%
Total Expenses	**$ 537,623**	**$ 464,739**	**$ (72,884)**	**-15.7%**	**$ 382,552**	**$ (155,071)**	**-40.5%**

Year to Date June	Current Year	Prior Year	Variance Amount	Percent	Annual Budget	Budget Variance Amount	Percent
Contracts	$ 253,684	$ 231,473	$ (22,211)	-9.6%	$ 250,000	$ (3,684)	-1.5%
Administration Wages	803,334	386,893	(416,441)	-107.6%	303,290	(500,044)	-164.9%
Maintenance Wages	320,283	535,433	215,150	40.2%	343,390	23,107	6.7%
Operations Wages	766,206	654,161	(112,046)	-17.1%	1,084,330	318,124	29.3%
Fringe Benefits	581,336	472,064	(109,271)	-23.1%	556,490	(24,846)	-4.5%
Taxes	-	-	-	0.0%	-	-	0.0%
Staffing Costs	200	-	(200)	0.0%	2,000	1,800	90.0%
Supplies	150,320	72,508	(77,812)	-107.3%	85,120	(65,200)	-76.6%
Information Technology	21,785	32,765	10,980	33.5%	71,000	49,215	69.3%
Maintenance Supplies	277,340	385,834	108,493	28.1%	382,200	104,860	27.4%
NRV Maintenance	9,831	25,194	15,363	61.0%	20,000	10,169	50.8%
Fuel	10,613	6,361	(4,252)	-66.8%	7,500	(3,113)	-41.5%
Utilities	331,715	323,268	(8,446)	-2.6%	409,900	78,185	19.1%
Public Education/Marketing	48,993	29,384	(19,609)	-66.7%	65,900	16,907	25.7%
Miscellaneous	777,076	645,709	(131,367)	-20.3%	1,009,500	232,424	23.0%
Total Expenses	**$ 4,352,715**	**$ 3,801,047**	**$ (551,668)**	**-14.5%**	**$ 4,590,620**	**$ 237,905**	**5.2%**

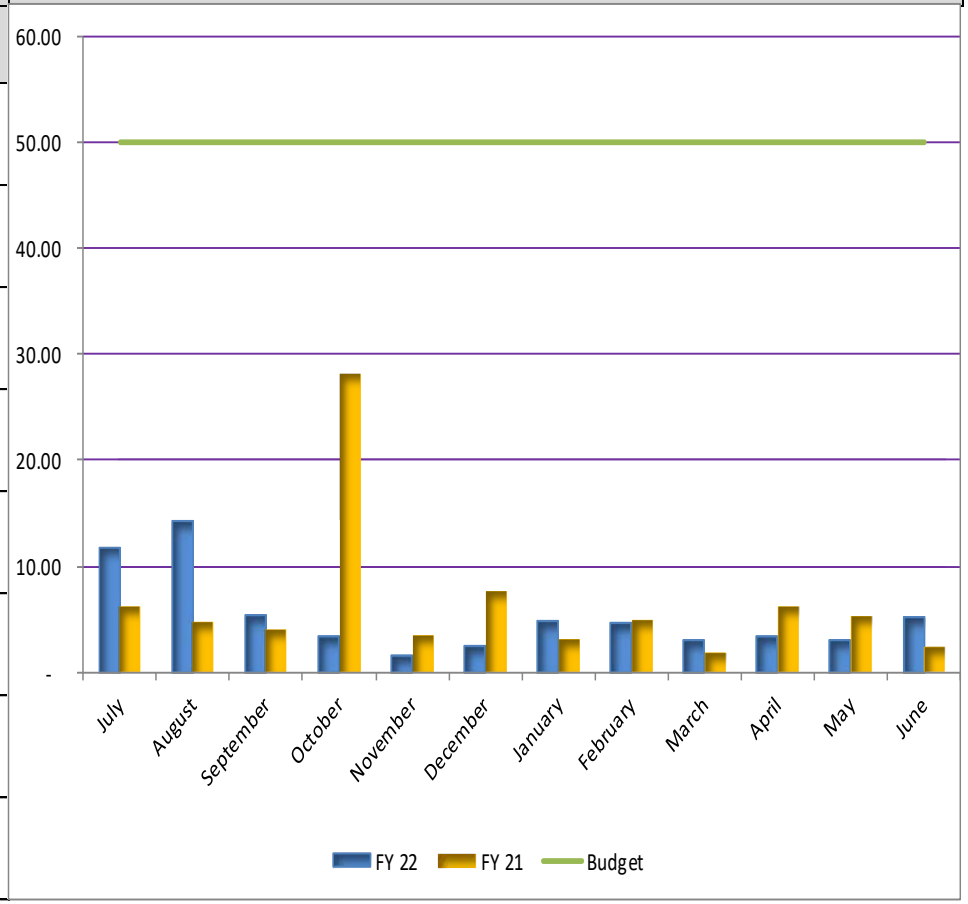
Accidents						
	FY 2022			FY 2021		
	Preventable	Non-Preventable	Total	Preventable	Non-Preventable	Total
July	0	0	0	0	1	1
August	0	0	0	0	1	1
September	0	0	0	0	0	0
October	0	1	1	0	0	0
November	0	0	0	0	2	2
December	0	1	1	0	0	0
January	0	0	0	0	0	0
February	0	3	3	0	0	0
March	0	0	0	0	2	2
April	0	0	0	0	0	0
May	0	0	0	1	0	1
June	0	1	1	1	0	1

NTD Preventable Accidents



*Note: Preventable accidents/incidents are defined by the contract between the City of Tucson and RATP Dev.

Customer Service Calls/E-Mails Received	
June 2022	
Total Calls & Emails Received	6
Inquiries	3
Compliments	0
Complaints	3
Non-Chargeable	3
Chargeable	0
Pending	0
Incomplete	0



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Ridership

Month to Date	June		Variance		June	Variance	
2022	Current	Prior Year	Amount	Percent	Budget	Amount	Percent
Passengers							
Regular Fare Passengers	13,836	10,413	3,423	32.9%	11,850	1,986	16.8%
Economy Fare Passengers	21,095	19,971	1,124	5.6%	29,380	(8,285)	-28.2%
Revenue Passengers	**34,931**	**30,384**	**4,547**	**15.0%**	**41,230**	**(6,299)**	**-15.3%**
Other Passengers (PCA)	**1,535**	**1,488**	**47**	**3.2%**	**2,430**	**(895)**	**-36.8%**
Total Passengers	**36,466**	**31,872**	**4,594**	**14.4%**	**43,660**	**(7,194)**	**-16.5%**

Month to Date	Calendar Days			Average Route Ridership	
	Current	Prior Year		Current	Prior Year
Weekdays	22	22	Weekdays	1,487	1,292
Saturdays	4	4	Saturdays	490	462
Sundays	4	4	Sundays	448	403
Holidays	0	0	Holidays	0	0
Total	30	30	Total	1,216	1,062

Year to Date	June YTD		Variance		June YTD	Variance	
	Current	Prior Year	Amount	Percent	Budget	Amount	Percent
Passengers							
Regular Fare Passengers	154,981	95,034	59,947	63.1%	148,780	6,201	4.2%
Economy Fare Passengers	244,577	177,579	66,998	37.7%	376,520	(131,943)	-35.0%
Revenue Passengers	**399,558**	**272,613**	**126,945**	**46.6%**	**525,300**	**(125,742)**	**-23.9%**
Other Passengers (PCA)	**17,943**	**14,847**	**3,096**	**20.9%**	**28,810**	**(10,867)**	**-37.7%**
Total Passengers	**417,501**	**287,460**	**130,041**	**45.2%**	**554,110**	**(136,609)**	**-24.7%**

Year to Date	Calendar Days			Average Route Ridership	
	Current	Prior Year		Current	Prior Year
Weekdays	255	256	Weekdays	1,437	970
Saturdays	50	51	Saturdays	480	382
Sundays	52	52	Sundays	424	321
Holidays	8	6	Holidays	624	507
Total	365	365	Total	1,144	788

Annual Ridership

CURRENT YEAR	JULY 2021	AUGUST 2021	SEPTEMBE 2021	OCTOBER 2021	NOVEMBE 2021	DECEMBER 2021	JANUARY 2022	FEBRUARY 2022	MARCH 2022	APRIL 2022	MAY 2022	JUNE 2022	YTD FY 2022
Demand Response	32,136	34,423	34,563	35,663	33,917	33,181	31,635	32,769	38,541	37,399	36,808	36,466	417,501
TOTAL	**32,136**	**34,423**	**34,563**	**35,663**	**33,917**	**33,181**	**31,635**	**32,769**	**38,541**	**37,399**	**36,808**	**36,466**	**417,501**

PREVIOUS YEAR	JULY 2020	AUGUST 2020	SEPTEMBE 2020	OCTOBER 2020	NOVEMBE 2020	DECEMBER 2020	JANUARY 2021	FEBRUARY 2021	MARCH 2021	APRIL 2021	MAY 2021	JUNE 2021	YTD FY 2021
Demand Response	19,235	20,121	21,967	24,487	22,293	21,529	20,186	21,677	26,689	28,590	28,814	31,872	287,460
TOTAL	**19,235**	**20,121**	**21,967**	**24,487**	**22,293**	**21,529**	**20,186**	**21,677**	**26,689**	**28,590**	**28,814**	**31,872**	**287,460**

VARIANCE	JULY	AUGUST	SEPTEMBE R	OCTOBER	NOVEMBE R	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	YTD FY 2022
Demand Response	12,901	14,302	12,596	11,176	11,624	11,652	11,449	11,092	11,852	8,809	7,994	4,594	130,041
TOTAL	**12,901**	**14,302**	**12,596**	**11,176**	**11,624**	**11,652**	**11,449**	**11,092**	**11,852**	**8,809**	**7,994**	**4,594**	**130,041**

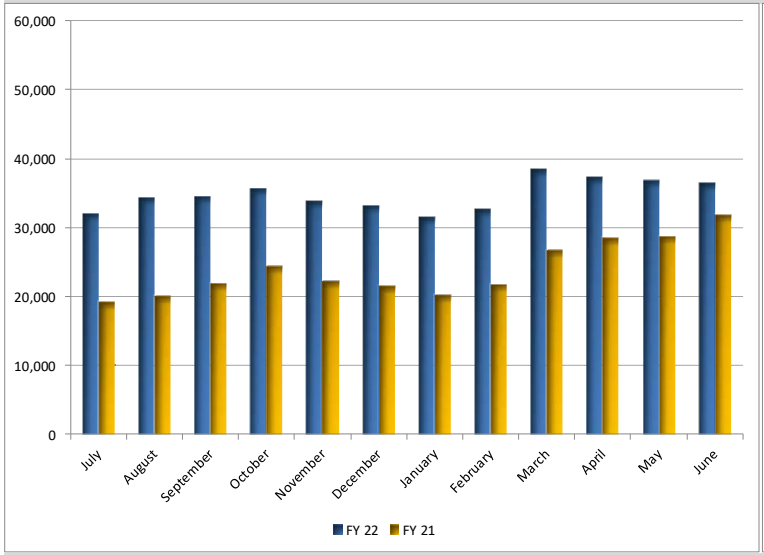
% VARIANCE	JULY	AUGUST	SEPTEMBE R	OCTOBER	NOVEMBE R	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	YTD FY 2022
Demand Response	67.1%	71.1%	57.3%	45.6%	52.1%	54.1%	56.7%	51.2%	44.4%	30.8%	27.7%	14.4%	45.2%
TOTAL	**67.1%**	**71.1%**	**57.3%**	**45.6%**	**52.1%**	**54.1%**	**56.7%**	**51.2%**	**44.4%**	**30.8%**	**27.7%**	**14.4%**	**45.2%**

TOTALS BY:	JULY 2021	AUGUST 2021	SEPTEMBE 2021	OCTOBER 2021	NOVEMBE 2021	DECEMBER 2021	JANUARY 2022	FEBRUARY 2022	MARCH 2022	APRIL 2022	MAY 2022	JUNE 2022	YTD FY 2022
Weekday	27,928	30,629	29,586	31,016	29,839	28,863	27,818	29,264	34,723	32,947	31,122	32,715	366,450
Saturday	2,264	1,786	1,949	2,450	1,960	1,491	1,749	1,838	1,987	2,627	1,954	1,958	24,013
Sunday	1,503	2,008	1,616	2,197	1,819	1,584	1,866	1,667	1,831	1,825	2,338	1,793	22,047
Holiday	441	-	1,412		299	1,243	202	-			1,394	-	4,991
TOTAL	**32,136**	**34,423**	**34,563**	**35,663**	**33,917**	**33,181**	**31,635**	**32,769**	**38,541**	**37,399**	**36,808**	**36,466**	**417,501**

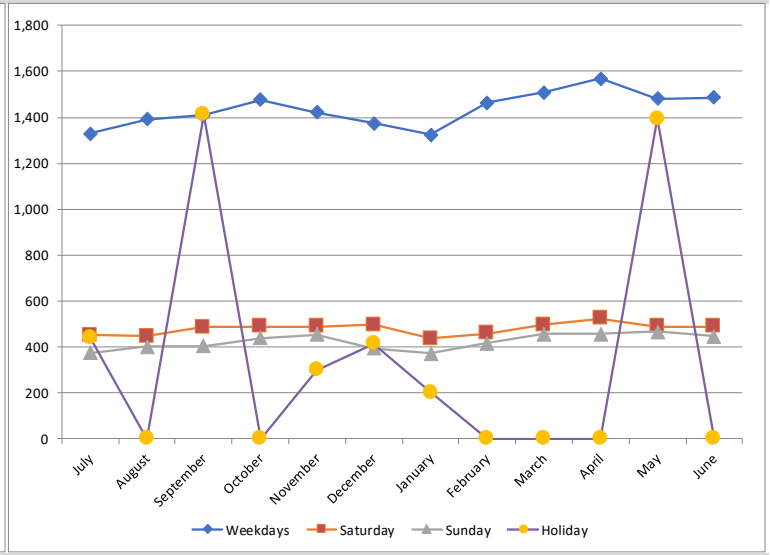
AVERAGES BY:	JULY 2021	AUGUST 2021	SEPTEMBE 2021	OCTOBER 2021	NOVEMBE 2021	DECEMBER 2021	JANUARY 2022	FEBRUARY 2022	MARCH 2022	APRIL 2022	MAY 2022	JUNE 2022	YTD FY 2022
Weekday	1,330	1,392	1,409	1,477	1,421	1,374	1,325	1,463	1,510	1,568.90	1,482.00	1,487.05	1,437.06
Saturday	453	447	487	490	490	497	437	460	497	525.40	488.50	489.50	480.26
Sunday	376	402	404	439	455	396	373	417	458	456.25	467.60	448.25	423.98
Holiday	441	-	1,412	-	299	414	202	-	-		1,394.00	**0.00**	623.88
TOTAL	**1,037**	**1,110**	**1,152**	**1,150**	**1,131**	**1,070**	**1,020**	**1,170**	**1,243**	**1,246.63**	**1,187.35**	**1,215.53**	**1,143.84**

Ridership Charts

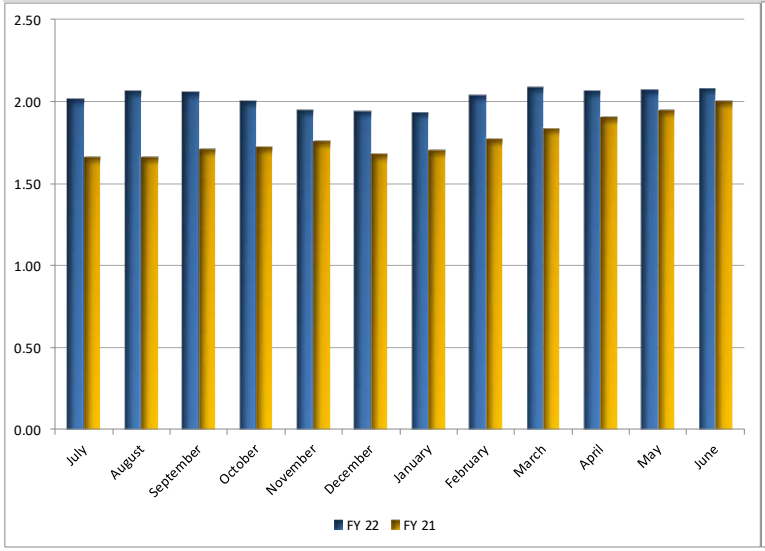
Total Ridership



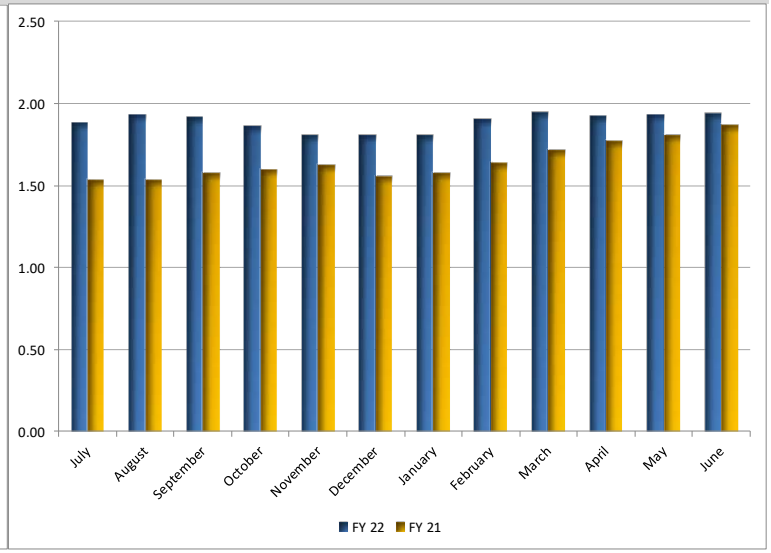
Average Ridership by Day



Passengers per Revenue Hour



Trips per Revenue Hour

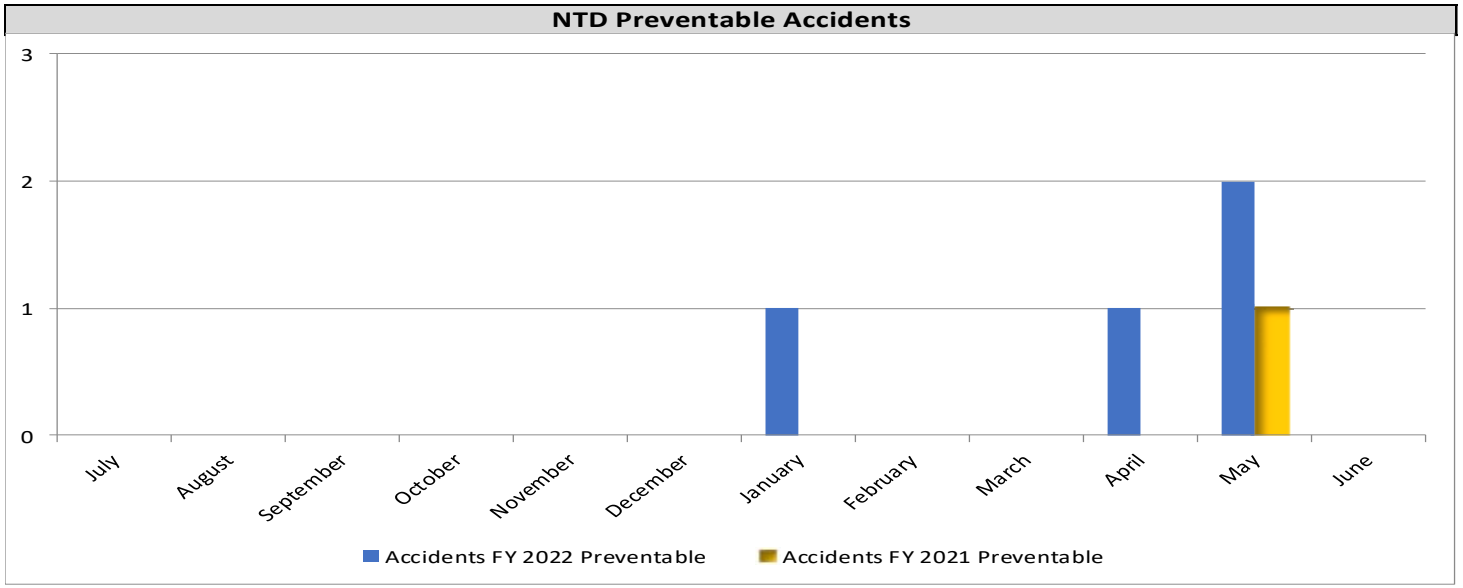


Expenses

Month to Date	June		Variance		Monthly	Variance	
2022	Current Year	Prior Year	Amount	Percent	Budget	Amount	Percent
OPERATOR WAGES	$ 683,944	$ 521,507	$ (162,437)	-31.1%	$ 504,603	$ (179,341)	-35.5%
OTHER BU WAGES	145,124	121,534	(23,590)	-19.4%	99,751	(45,374)	-45.5%
SALARIES	99,946	127,099	27,153	21.4%	98,320	(1,626)	-1.7%
FRINGE BENEFITS	252,087	235,379	(16,709)	-7.1%	313,568	61,480	19.6%
SERVICES	529,678	251,176	(278,502)	-110.9%	104,908	(424,770)	-404.9%
CONTRACT VEHICLE MAINT.	291,042	141,393	(149,649)	-105.8%	158,333	(132,709)	-83.8%
UTILITIES	21,425	17,818	(3,606)	-20.2%	19,333	(2,091)	-10.8%
MATERIALS AND SUPPLIES	217,439	80,393	(137,046)	-170%	23,483	(193,955)	-825.9%
DIESEL FUEL	-	0	0	0.0%	500	500	100.0%
UNLEADED FUEL	312,086	276,564	(35,522)	-12.8%	146,550	(165,536)	-113.0%
CAPITAL OUTLAY	-	-	-	0.0%	3,333	3,333	100.0%
LIABILITY INSURANCE	12,500	24,990	12,490	50.0%	47,500	35,000	73.7%
LABOR CREDITS/EXP TRANSFE	-	-	-	0.0%	(20,000)	(20,000)	100.0%
TOTAL EXPENSES	**$ 2,565,271**	**$ 1,797,853**	**$ (767,417)**	**-42.7%**	**$ 1,500,183**	**$ (1,065,087)**	**-71.0%**

Year to Date	June YTD		Variance		YTD	Variance	
	Current Year	Prior Year	Amount	Percent	Budget	Amount	Percent
OPERATOR WAGES	$ 5,828,591	$ 4,890,287	$ (938,304)	-19.2%	$ 6,055,240	$ 226,649	3.7%
OTHER BU WAGES	1,251,349	1,184,195	(67,154)	-5.7%	1,197,010	(54,339)	-4.5%
SALARIES	941,535	1,047,202	105,668	10.1%	1,179,840	238,306	20.2%
FRINGE BENEFITS	2,947,769	2,660,051	(287,718)	-10.8%	3,762,810	815,041	21.7%
SERVICES	1,176,302	888,579	(287,723)	-32.4%	1,258,900	82,598	6.6%
CONTRACT VEHICLE MAINT.	1,669,521	1,462,763	(206,757)	-14.1%	1,900,000	230,479	12.1%
UTILITIES	183,584	177,006	(6,578)	-3.7%	232,000	48,416	20.9%
MATERIALS AND SUPPLIES	240,944	189,969	(50,975)	-26.8%	281,800	40,856	14.5%
DIESEL FUEL	-	-	-	0.0%	6,000	6,000	100.0%
UNLEADED FUEL	1,598,810	786,421	(812,389)	-103.3%	1,758,600	159,790	9.1%
CAPITAL OUTLAY	7,507	19,519	12,012	61.5%	40,000	32,493	81.2%
LIABILITY INSURANCE	543,094	486,129	(56,965)	-11.7%	570,000	26,906	4.7%
LABOR CREDITS/EXP TRANSFE	-	(9,018)	(9,018)	100.0%	(240,000)	-	0.0%
TOTAL EXPENSES	**$ 16,389,005**	**$ 13,783,104**	**$ (2,605,901)**	**-18.9%**	**$ 18,002,200**	**$ 1,613,195**	**9.0%**

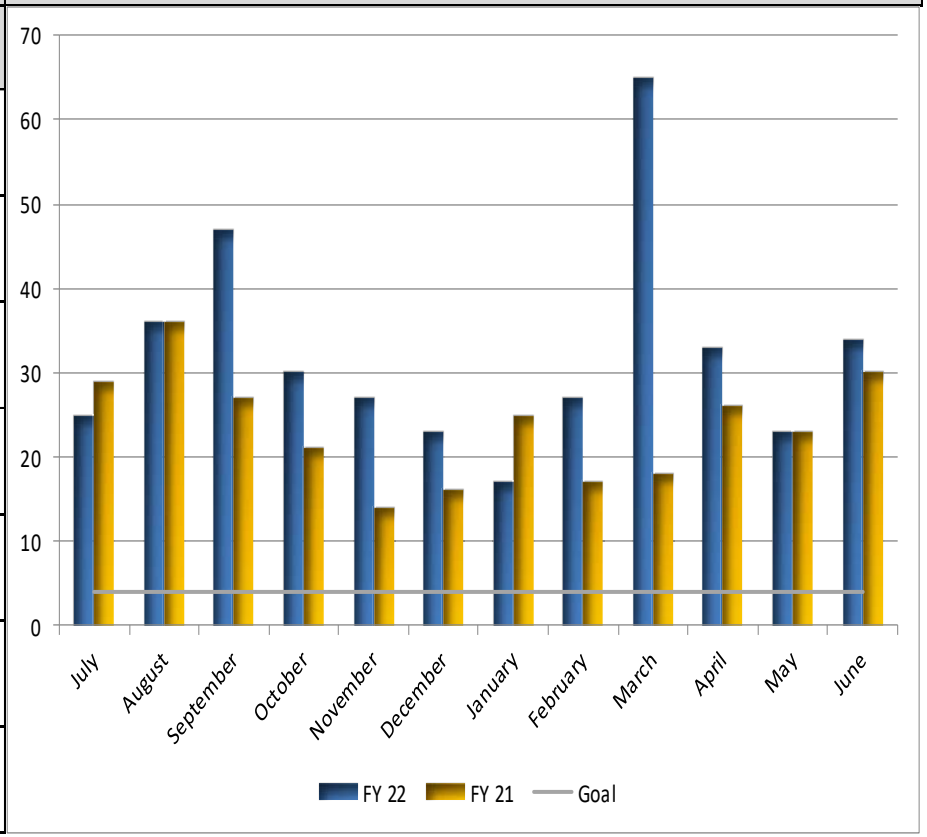
Accidents						
	FY 2022			FY 2021		
	Preventable	Non-Preventable	Total	Preventable	Non-	Total
July	0	1	1	0	1	1
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	0	1	1	0	0	0
November	0	0	0	0	0	0
December	0	2	2	0	1	1
January	1	0	1	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	1	1
April	1	0	1	0	0	0
May	2	0	2	1	1	2
June	0	0	0	0	2	2



*Note: Preventable accidents/incidents are defined by the contract between the City of Tucson and RATP Dev.

Customer Service Calls/E-Mails Received	
June 2022	
Total Calls/E-mails Received	34
Inquiries	0
Compliments	2
Complaints	32
Non-Chargeable	13
Chargeable	19
Pending/Incomplete	0

Total Complaints per 10,000 Passengers



Glossary of Terms

Cancellations (Sun Van)	When the passenger or the passenger's representative cancels the reservation two or more hours prior to the beginning of the scheduled pick-up time.
Complaints per 100,000 Passengers	Equals total complaints divided by total passengers times 100,000.
Cost per Mile	Equals total operating expenditures divided by total miles.
Cost per Service Hour	Equals total operating expenditures divided by total service hours.
Cost per Trip (Sun Van)	Total operating expenses divided by total trips.
Deadhead Miles and Hours	Miles that a vehicle travels when out of revenue service. Deadhead includes leaving or returning to the garage or yard facility, changing routes or when there is no expectation of carrying revenue passengers. Deadhead does not include operator or maintenance training.
Denial (Sun Van)	An ADA-eligible trip requested that is not scheduled by Sun Van within the permissible scheduled window of one hour before or one hour after the requested pick up time.
MDBF (Sun Link)	Mean distance between failure is the distance between failures of any of the major sub-systems of the streetcar that cause significant delays or disruptions of service and/or cause the streetcar to be removed from service.
No-Shows (Sun Van)	When the passenger does not board the Sun Van vehicle when the vehicle arrives at the pick-up location within the pick-up window and the driver waits two minutes, or when the customer does not cancel the reservation within two the scheduled pick-up time.
On-Time	Sun Tran: A bus may be up to 5 minutes late, but less than 1 minute early and be classified as on-time. Sun Link: Regularly scheduled streetcars arriving at their last station stop less than six minutes behind schedule. Sun Van: The vehicle is considered on-time if it arrives between 15 minutes before or 15 minutes after the requested pick-up time.
Optional ADA (Sun Van)	Passenger trips outside 3/4-mile corridors around Sun Tran fixed routes or beyond times availbale on a Sun Tran fixed route, a same day request, and will calls.
Passengers per Mile	Equals total passengers divided by total revenue miles.
Passengers per Service Hour	Equals total ridership divided by total service hours.
Passenger Revenue	Equals revenue collected from passengers (includes farebox revenue and revenue from pass sales).

Pick-Ups Before Significantly Late (Sun Van)	Pick-ups 30 minutes outside of the originally scheduled pick-up window.
Revenue Miles and Hours	The miles and hours that vehicles travel while in revenue service. Vehicle revenue miles and hours (VRM and VRH) include layover/recovery time but exclude deadhead, operator training and maintenance testing.
Revenue per Mile	Equals total passenger revenue divided by total miles.
Revenue per Passenger	Equals total passenger revenue divided by total passengers.
Revenue per Service Hour	Equals passenger revenue divided by service hours.
Revenue per Trip (Sun Van)	Total passenger revenue divided by trips.
Ridership (Unlinked Passenger Trips)	The number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.
Ridership (Unlinked Passenger Trips) Sun Van	Equals Total passengers actually transported. A one-way trip taken by an ADA paratransit-eligible passenger, a personal care attendant (PCA) or companions from the pick-up point to the destination.
Road Calls	A road call is defined as a mechanical failure of a vehicle in revenue service that necessitates removing the vehicle from service until repairs are made.
Service Miles and Hours	Miles and hours that vehicles travel while in revenue service plus deadhead miles/hours. Service miles/hours does not include operator or maintenance traing.
Total Demand (Sun Van)	Total number of passenger trips requested.
Total Cost per Passenger	Equals total operating expenditures divided by total passengers.
Trip (Sun Van)	A one-way trip taken by an ADA paratransit-eligible passenger from the pick-up point to the destination (excludes PCA's and companions).
Trip Time (Sun Van)	The percentage of ADA trips with a trip time less than the comparable Sun Tran fixed route trip.
Trip Time 110% + 5 Minutes (Sun Van)	When an ADA trip length exceed 110% + 5 minutes of the comparable Sun Tran fixed route trip.

Appendix D: City of Tucson, Mayor and Council meeting agenda(s) with LAR(s)

Title VI – Service & Fare Equity Analysis Completed – City of Tucson Mayor & Council Legal Action Reports (LAR) in Appendix D				
	Service or Fare Equity Analysis Completed	**Presented / approved**	**Resolution Number**	**Results**
1	Proposed Major Service Changes for Fiscal Year 2021. Route 22, Grande	22 Sept 2020	23239	*Approved analysis on Consent Agenda item 7.i.*
2	Fare Equity Analysis for Suspension of Fares	27 Sept 2022		
3	Major Service Change Equity Analysis for Reduction of Express Services	27 Sept 2022		

1.	**Board approval of Service Standards**	**9/27/2022**
2.	**Board Approval of Major Service Change Policy, Disparate Impact Policy, and Disproportionate Burden Policy**	**9/27/2022**
3.	**Board Approval of service and fare equity analyses**	**See chart above**
4.	**Board Approval of Title VI Monitoring**	**9/27/2022**
5.	**Title VI Program Approved by the Board of Directors Resolution #**	**9/27/2022**