



# **AGENDA**

## ***Executive Committee Meeting***

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### **Committee Members**

Andrew Do, Chairman  
Mark A. Murphy, Vice Chairman  
Lisa A. Bartlett  
Michael Hennessey  
Steve Jones  
Tim Shaw

Orange County Transportation Authority  
Headquarters  
Conference Room 07  
550 South Main Street  
Orange, California  
**Monday, August 2, 2021 at 9:00 a.m.**

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the Orange County Transportation Authority (OCTA) Clerk of the Board, telephone (714) 560-5676, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Agenda descriptions are intended to give members of the public a general summary of items of business to be transacted or discussed. The posting of the recommended actions does not indicate what action will be taken. The Committee may take any action which it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

All documents relative to the items referenced in this agenda are available for public inspection at [www.octa.net](http://www.octa.net) or through the Clerk of the Board's office at the OCTA Headquarters, 600 South Main Street, Orange, California.

### **Guidance for Public Access to the Board of Directors/Committee Meeting**

On March 12, 2020 and March 18, 2020, Governor Gavin Newsom enacted Executive Orders N-25-20 and N-29-20 authorizing a local legislative body to hold public meetings via teleconferencing and make public meetings accessible telephonically or electronically to all members of the public to promote social distancing due to the state and local State of Emergency resulting from the threat of Novel Coronavirus (COVID-19).

In accordance with Executive Order N-29-20, and in order to ensure the safety of the OCTA Board of Directors (Board) and staff and for the purposes of limiting the risk of COVID-19, in-person public participation at public meetings of the OCTA will not be allowed during the time period covered by the above-referenced Executive Orders.

Instead, members of the public can listen to AUDIO live streaming of the Board and Committee meetings by clicking the below link:

<http://www.octa.net/About-OCTA/Who-We-Are/Board-of-Directors/Live-and-Archived-Audio/>



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## **Guidance for Public Access to the Board of Directors/Committee Meeting (Continued)**

Public comments may be submitted for the upcoming Board and Committee meetings by emailing them to [ClerkOffice@octa.net](mailto:ClerkOffice@octa.net).

If you wish to comment on a specific agenda Item, please identify the Item number in your email. All public comments that are timely received will be part of the public record and distributed to the Board. Public comments will be made available to the public upon request.

In order to ensure that staff has the ability to provide comments to the Board Members in a timely manner, please submit your public comments **90 minutes prior to the start time of the Board and Committee meeting date.**

### **Call to Order**

### **Roll Call**

### **Pledge of Allegiance**

Director Jones

### **1. Public Comments**

### **Special Calendar**

There are no Special Calendar matters.

### **Consent Calendar (Items 2 through 4)**

All items on the Consent Calendar are to be approved in one motion unless a Committee Member or a member of the public requests separate action or discussion on a specific item.

### **2. Approval of Minutes - July 1, 2021**

Approval of the minutes of the Executive Committee meeting of July 1, 2021.

### **3. Approval of Minutes - June 7, 2021**

Approval of the minutes of the Executive Committee meeting of June 7, 2021.



**4. Public Transportation Agency Safety Plan - Annual Review and Update**  
Matthew DesRosier/Maggie McJilton

**Overview**

The Federal Transit Administration published the Public Transportation Agency Safety Plan regulation, 49 Code of Federal Regulations Part 673, on July 19, 2018, which took effect on July 19, 2019. Within this regulation, it is required that every agency receiving funds under the Section 5307 Urbanized Area Formula program (must develop and have adopted by the Board of Directors a Public Transportation Agency Safety Plan for its transit system. The Board of Directors adopted the Orange County Transportation Authority's Public Transportation Agency Safety Plan on May 11, 2020, as required. Consistent with the regulation, staff has conducted an annual review and recommended updates for Board of Directors consideration.

**Recommendations**

- A. Adopt the proposed 2021 Public Transportation Agency Safety Plan safety performance targets and administrative edits.
- B. Adjust the annual review and Board of Directors update to be scheduled on a calendar year basis to align with the calendar year reporting requirements of the Federal Transit Administration National Transit Database.

**Regular Calendar**

**5. Capital Programs Division - Fourth Quarter Fiscal Year 2020-21 and Planned Fiscal Year 2021-22 Capital Action Plan Performance Metrics**  
James G. Beil

**Overview**

Staff has prepared a quarterly progress report on capital project delivery for the period of April 2021 through June 2021, for review by the Orange County Transportation Authority Board of Directors. This report highlights the Capital Action Plan for project delivery, which is used as a performance metric to assess delivery progress on highway, transit, and rail projects.

**Recommendation**

Receive and file as an information item.



## **Discussion Items**

**6. Administrative Support for the Los Angeles - San Diego - San Luis Obispo Rail Corridor Agency**

Jennifer L. Bergener

In August 2013, the Orange County Transportation Authority was selected through a competitive process to serve as the managing agency for the Los Angeles - San Diego - San Luis Obispo Regional Corridor Agency. An overview of the Los Angeles - San Diego - San Luis Obispo Rail Corridor Agency and Orange County Transportation Authority's role serving as the managing will be provided.

**7. Chief Executive Officer's Report**

**8. Committee Members' Reports**

**9. Closed Session**

There are no Closed Session items scheduled.

**10. Adjournment**

The next regularly scheduled meeting of this Committee will be held at **9:00 a.m. on THURSDAY, September 2, 2021**, at the Orange County Transportation Authority Headquarters, Conference Room 07, 550 South Main Street, Orange, California.



# **MINUTES**

## ***Executive Committee Meeting***

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### **Committee Members Present via Teleconference**

Andrew Do, Chairman  
Mark A. Murphy, Vice Chairman  
Lisa Bartlett  
Michael Hennessey  
Steve Jones

### **Staff Present**

Jennifer L. Bergener, Deputy Chief Executive Officer  
Gina Ramirez, Clerk of the Board Specialist, Senior  
Sahara Meisenheimer, Clerk of the Board Specialist

### **Via Teleconference**

Darrell E. Johnson, Chief Executive Officer  
James Donich, General Counsel

### **Committee Members Absent**

Tim Shaw

## **Call to Order**

The July 1, 2021, regular meeting of the Executive Committee (Committee) was called to order by Chairman Do at 9:04 a.m.

## **Roll Call**

The Clerk of the Board Specialist, Senior conducted an attendance roll call and announced a quorum of the Committee.

## **Pledge of Allegiance**

Chairman Do led in the Pledge of Allegiance.

Chairman Do announced that due to schedule conflicts, the Committee would recess into Closed Session, and when the Committee returned to open session, Vice Chairman Murphy would chair the remainder of the meeting.

## **6. Closed Session**

A Closed Session was held as follows:

- A. Pursuant to Government Code Section 54957(b) to evaluate the performance of the Chief Executive Officer, Darrell E. Johnson.
- B. Pursuant to Government Code Section 54957.6 to meet with the designated representative, Chairman Andrew Do, regarding the compensation of the Chief Executive Officer, Darrell E. Johnson.

There was no report out for Closed Session items letters A and B.



**1. Public Comments**

There were no Public Comments received.

**Special Calendar**

There were no Special Calendar matters.

**Consent Calendar (Items 2 and 3)**

**2. Approval of Minutes**

Due to a lack of quorum, the June 7, 2021 meeting minutes will return to the August 2, 2021, Executive Committee meeting for consideration.

**3. Public Transportation Agency Safety Plan - Annual Review and Update**

Due to a lack of quorum, no action was taken on this item, and it will return to the August 2, 2021, Executive Committee meeting for consideration.

**Recommendations**

- A. Adopt the proposed 2021 Public Transportation Agency Safety Plan safety performance targets and administrative edits.
- B. Adjust the annual review and Board of Directors update to be scheduled on a calendar year basis to align with the calendar year reporting requirements of the Federal Transit Administration National Transit Database.

**Regular Calendar**

There were no Regular Calendar items scheduled.

## **Discussion Items**

### **4. Chief Executive Officer's Report**

Darrell E. Johnson, Chief Executive Officer (CEO), reported on the following:

- Staff would continue the Consent Calendar items 2 and 3 to the August 2, 2021, Executive Committee Meeting.

#### **Hazard Mitigation Plan –**

- Staff is developing a Hazard Mitigation Plan to support emergency and crisis management plans and strengthen preparedness for natural hazards such as flooding, earthquakes, and wildfires.
- On June 30<sup>th</sup>, a virtual Open House was hosted for public input on the draft plan.
- The 30-day public comment period remains open through July 21<sup>st</sup>.
- Any feedback received will assist in developing a plan that ensures the running of transportation services, even in the event of a natural disaster.
- To submit a comment or to get more information, the public is encouraged to visit [octa.net/HMP](http://octa.net/HMP).

#### **Independence Day –**

- The OCTA Administrative Offices will be closed on July 5<sup>th</sup>, in observance of Independence Day.
- Mr. Johnson, CEO, wished everyone a happy and safe holiday weekend in celebration of freedom, with gratitude to the brave heroes who have helped make America such a great nation.

### **5. Committee Members' Reports**

Director Hennessy wished everyone a Happy July 4<sup>th</sup>.

Vice Chairman Murphy echoed Director Hennessey's sentiment. Committee Chairman Murphy announced a firework show on the evening of July 3<sup>rd</sup>, at Grijalva Park in the City of Orange. He also wished everyone a Happy July 4<sup>th</sup> and to remember those who gave the ultimate sacrifice.



**7. Adjournment**

The meeting was adjourned at 9:34 a.m.

The next regularly scheduled meeting of this Committee will be held at **9:00 a.m. on Monday, August 2, 2021**, at the Orange County Transportation Authority Headquarters, Conference Room 07, 550 South Main Street, Orange, California.

ATTEST

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Mark Murphy  
Vice Chairman

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Gina Ramirez  
Clerk of the Board Specialist, Senior





# **MINUTES**

## ***Executive Committee Meeting***

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### **Committee Members Present via Teleconference**

Andrew Do, Chairman  
Mark A. Murphy, Vice Chairman  
Lisa Bartlett  
Michael Hennessey  
Steve Jones  
Tim Shaw

### **Staff Present**

Jennifer L. Bergener, Deputy Chief Executive Officer  
Gina Ramirez, Deputy Clerk of the Board  
Allison Cheshire, Interim Deputy Clerk of the Board

### **Via Teleconference**

Darrell E. Johnson, Chief Executive Officer  
James Donich, General Counsel

### **Committee Members Absent**

None

### **Call to Order**

The June 7, 2021 regular meeting of the Executive Committee (Committee) was called to order by Chairman Do at 9:03 a.m.

### **Roll Call**

The Deputy Clerk of the Board conducted an attendance roll call and announced a quorum of the Committee.

### **Pledge of Allegiance**

Director Bartlett led in the Pledge of Allegiance.

#### **1. Public Comments**

There were no Public Comments.

### **Special Calendar**

There were no Special Calendar matters.

### **Consent Calendar (Items 2 through 4)**

#### **2. Approval of Minutes**

A motion was made by Vice Chairman Murphy, seconded by Director Hennessey, and following a roll call vote, declared passed 6-0, to approve the minutes of the Executive Committee meeting of May 3, 2021.

**3. Agreement for System Security Program Review and Update**

A motion was made by Vice Chairman Murphy, seconded by Director Hennessey, and following a roll call vote, declared passed 6-0, to:

**Recommendations**

- A. Approve the selection of ADS System Safety Consulting, LLC, as the firm to provide consulting services to review and update the Security Program.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-0-2729 between the Orange County Transportation Authority and ADS System Safety Consulting, LLC in the amount of \$345,692 to provide consulting services to review and update the current security program.

**4. Amendment to Cooperative Agreement with the County of Orange, Orange County Sheriff's Department**

A motion was made by Vice Chairman Murphy, seconded by Director Hennessey, and following a roll call vote, declared passed 6-0, to authorize the Chief Executive Officer to negotiate and execute Amendment No. 2 to Cooperative Agreement No. C-0-2330 between the Orange County Transportation Authority and County of Orange, Orange County Sheriff's Department, in the amount of \$11,133,059, for Transit Police Services, effective July 1, 2021 through June 30, 2022. This will increase the maximum obligation of the agreement to a total contract value of \$21,739,395.

**Regular Calendar**

**5. Measure M2 Quarterly Progress Report for the Period of January 2021 Through March 2021**

Kia Mortazavi, Executive Director of Planning, provided a PowerPoint presentation on this item.

Director Bartlett inquired on the Interstate 5 at El Toro Road interchange and the three different options involving the three cities. In addition, she asked how OCTA would balance the continued congestion in the area while the various stakeholders were reviewing the options.

### **5. (Continued)**

Mr. Mortazavi responded that Darrell E. Johnson, Chief Executive Officer (CEO), met with Ryan Chamberlain, District Director of Caltrans, District 12, and the City Managers of Laguna Woods, Laguna Hills, and Lake Forest to discuss the project status.

Mr. Mortazavi stated that OCTA funded a supplemental study on alternatives, and the cities are now reviewing two options. However, local land-use decisions need to be resolved before any cities can weigh in on the interchange solution. He also noted that OCTA's commitment is part of the ordinance, and there are funds included in the Next 10 Plan for the project.

Following the discussion, no action was taken on this receive and file as an information item.

## **Discussion Items**

### **6. Fiscal Year 2021-22 Budget Workshop Follow-up**

Anthony Baruch, Section Manager III of Financial Planning and Analysis, provided a verbal report on the follow-up questions, issues, or concerns that may have arisen since the budget workshop conducted with the Board of Directors on May 10, 2021. Mr. Baruch referenced the handout that was provided to the Committee Members in advance of today's Committee meeting.

Following the discussion, no action was taken on this information item.

### **7. Chief Executive Officer's Report**

Darrell E. Johnson, CEO, reported the following:

#### **South Orange County Multimodal Transportation Study (SOCMTS)**

- OCTA continues to advance the SOCMTS, identifying several mobility strategies for long-term improvements to local streets, transit, freeways, and bikeways in south Orange County.
- To get public feedback, staff will promote an online survey and host a series of meetings this month.
- On June 15<sup>th</sup> at 9:00 a.m., OCTA is hosting an elected official roundtable via Zoom.
- On June 17<sup>th</sup>, OCTA is hosting a telephone town hall from 5:30 p.m. to 6:30 p.m.
- On June 23<sup>rd</sup> at 9:00 a.m., the staff is hosting a stakeholder roundtable via Zoom.



**7. (Continued)**

- Staff is also launching a virtual meeting room today that will stay open through July 12<sup>th</sup> for people to learn more about the study and provide their feedback.
- For more information, please visit [octa.net/southocstudy](https://octa.net/southocstudy).

**8. Committee Members' Reports**

There were no Committee Members' Reports

**9. Closed Session**

There were no Closed Session items scheduled.

**10. Adjournment**

The meeting was adjourned at 9:39 a.m.

The next regularly scheduled meeting of this Committee will be held at **9:00 a.m. on Thursday, July 1, 2021**, at the Orange County Transportation Authority Headquarters, Conference Room 07, 550 South Main Street, Orange, California.

ATTEST

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Andrew Do  
Chairman


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Gina Ramirez  
Deputy Clerk of the Board



**August 2, 2021**

**To:** Executive Committee

**From:** Darrell E. Johnson, Chief Executive Officer 

**Subject:** Public Transportation Agency Safety Plan – Annual Review and Update

### **Overview**

The Federal Transit Administration published the Public Transportation Agency Safety Plan regulation, 49 Code of Federal Regulations Part 673, on July 19, 2018, which took effect on July 19, 2019. Within this regulation, it is required that every agency receiving funds under the Section 5307 Urbanized Area Formula program (must develop and have adopted by the Board of Directors a Public Transportation Agency Safety Plan for its transit system. The Board of Directors adopted the Orange County Transportation Authority's Public Transportation Agency Safety Plan on May 11, 2020, as required. Consistent with the regulation, staff has conducted an annual review and recommended updates for Board of Directors consideration.

### **Recommendations**

- A. Adopt the proposed 2021 Public Transportation Agency Safety Plan safety performance targets and administrative edits.
- B. Adjust the annual review and Board of Directors update to be scheduled on a calendar year basis to align with the calendar year reporting requirements of the Federal Transit Administration National Transit Database.

### **Background**

The Health, Safety, and Environmental Compliance Department (HSEC) oversees safety compliance programs and the Public Transportation Agency Safety Plan (PTASP) adoption by the Orange County Transportation Authority (OCTA). The Board of Directors (Board) adopted OCTA's PTASP on May 11, 2020. The PTASP includes four primary components and 16 subcomponents.

**Component 1: Safety Management Policy**

**Subcomponents:**

- Written Statement of Policy
- Process for reporting unsafe conditions/near-miss incidents
- Safety management policy communication
- Authorities, accountabilities, and responsibilities

**Component 2: Safety Risk Management**

**Subcomponents:**

- Safety risk management process
- Safety hazard/near-miss incident identification and reporting
- Safety risk assessment
- Safety risk mitigation

**Component 3: Safety Assurance**

**Subcomponents:**

- Safety performance monitoring and measurement
- Hazard mitigation monitoring process
- Accident notification, investigation, and reporting
- Internal safety reporting program monitoring
- Management of change
- Continuous improvement

**Component 4: Safety Promotion**

**Subcomponents:**

- Safety training program
- Safety communication

OCTA has completed the first year of plan implementation and assessed overall safety program results against initial safety performance targets and the action items identified. In addition, some of the processes and tools described in the initial PTASP requires updating which must be reflected in a revised 2021 PTASP document.

***Discussion***

The safety performance targets initially adopted in the PTASP were associated with OCTA's National Transit Database (NTD) reportable events including fatalities, injuries, and safety events. Using a baseline rate per 100,000 vehicle revenue miles (VRM), datapoints were established that served as targets for the year's performance. When allocating a performance target for system reliability, a baseline was established for the number of road calls per VRM.

Baseline metrics that served as OCTA’s fixed-route bus performance targets are shown in the table below.

	<b>Objective</b>	<b>Metric</b>	<b>Baseline</b>	<b>Target</b>
<b>Bus</b>	Reduce Fatalities	Fatalities per 100K VRM	0.00	Maintain
	Reduce Injuries	Injuries per 100K VRM	0.59	Maintain
	Reduce Safety Events	Safety Events per 100K VRM	1.03	Maintain
	Maintain System Reliability	Miles between Road Calls	1 per 14K VRM	Maintain

Baseline metrics that served as OCTA’s paratransit service performance targets are shown below.

	<b>Objective</b>	<b>Metric</b>	<b>Baseline</b>	<b>Target</b>
<b>Paratransit</b>	Reduce Fatalities	Fatalities per 100K VRM	0.00	Maintain
	Reduce Injuries	Injuries per 100K VRM	0.00	Maintain
	Reduce Safety Events	Safety Events per 100K VRM	0.00	Maintain
	Maintain System Reliability	Miles between Road Calls	1 per 14K VRM	Maintain

OCTA met all the established safety performance targets except for fatalities. OCTA experienced one fatality on November 28, 2020, when a pedestrian intentionally jumped beneath the rear curbside tires that led to their death. This was a non-preventable event and did not occur due to any action or failure of the system or the coach operator.

OCTA fixed-route bus performance actuals are shown below.

	<b>Objective</b>	<b>Metric</b>	<b>Target</b>	<b>Actuals</b>
<b>Bus</b>	Reduce Fatalities	Fatalities per 100K VRM	0.00	0.007
	Reduce Injuries	Injuries per 100K VRM	0.59	0.22
	Reduce Safety Events	Safety Events per 100K VRM	1.03	0.80
	Maintain System Reliability	Miles between Road Calls	1 per 14K VRM	15,746

OCTA paratransit service actuals are shown below.

	<b>Objective</b>	<b>Metric</b>	<b>Target</b>	<b>Actuals</b>
<b>Paratransit</b>	Reduce Fatalities	Fatalities per 100K VRM	0.00	0.00
	Reduce Injuries	Injuries per 100K VRM	0.00	0.00
	Reduce Safety Events	Safety Events per 100K VRM	0.00	0.00
	Maintain System Reliability	Miles between Road Calls	1 per 14K VRM	28,822

OCTA's safety performance targets are established using data gathered from the Federal Transit Administration's (FTA) NTD reporting requirements. These requirements establish reporting criteria, and the timeline of which events are required to be reported. Events are required to be reported to the FTA every 30 days, with an annual report due by March of each year. The annual reporting requirement summarizes the events that have occurred throughout the calendar year. While OCTA adopted the PTASP as directed by the regulation in May 2020, this adoption date does not coincide with the required annual reporting each March. In order to align the reporting and adoption cycles, staff recommends switching the PTASP review cycle to a calendar year cycle that matches the reporting and data management requirements of the FTA's reporting cycle. This July 2021 update will go forward until the next annual review is rescheduled and performed in February 2023.

OCTA's action items for the implementation of new Safety Management System (SMS) processes and procedures are documented in Appendix A and were developed as part of the May 2020 PTASP. In review of the action items list, all items that required action and the allocation of resources were either completed on-time or delayed due to unforeseen circumstances caused by the coronavirus pandemic. In total, out of the 14 established action items, 11 were completed on time, one was delayed by four months, and two are still pending completion.

Some of the completed action items include, but are not limited to, the establishment of a staff PTASP/SMS Committee, the establishment of a documentation control/management system within SharePoint, PTASP/SMS communication tools and strategies, creation of an anonymous safety hazard reporting system, and the implementation of a formal risk assessment process.

One of the action items that had an unexpected delay due to the pandemic was the safety culture survey, originally scheduled to be completed by December 31, 2020. Due to a heightened number of employee communications regarding pandemic planning and response, the survey was intentionally delayed and completed in April 2021. The two outstanding action items remain in a pending status due to the development and programming of a new online software solution. OCTA is transitioning its HSEC and risk management data management system from an obsolete system called the Occurrence Tracking System (OTS) to a cloud-based solution called Origami. With this process underway, establishment of a single SMS data depository and a hazard/risk mitigation monitoring process have yet to be completed.

Upon review of the May 2020 PTASP and the organization's performance to date, staff is recommending updates to one safety performance target, future action item target dates, and significant changes to the processes described within the document that have changed.



One item realized during the first year of PTASP vehicle reliability monitoring was that Paratransit vehicles are less complex than a fixed-route bus and therefore are more reliable in performance. Increased reliability leads to decreased road calls. Staff is requesting that the system reliability target for paratransit be changed to one road call per 25,000 VRM and all other safety performance targets remain the same for the upcoming PTASP cycle (2021-2022).

Recommended edits to the PTASP include the following.

<b>Section</b>	<b>Recommended Edits</b>
4.0	Adopt new Paratransit miles between road calls safety performance target to 25,000 VRM
Acronyms, 6.3, 7.1, 7.3	Change OTS references to Origami
Appendix B	Update risk assessment process to reflect changes in risk ranking/rating criteria and designed features within Origami
Appendix A	Adopt a new timeline date for incorporation of OC Streetcar into PTASP - 2022 PTASP update
Appendix A	Adopt new timeline for establishment of a hazard/risk mitigation monitoring process – Q4 2021 (December)
Appendix A	Adopt new timetable for the establishment a single data depository for safety and SMS data/dashboard – Q4 2021 (December)

***Summary***

Staff is requesting the Board accept OCTA's updated May 2021 PTASP and 2021 annual review, thereby confirming compliance with federal law. In addition, staff is requesting that the annual review and Board update be adjusted to a calendar year basis to align with FTA NTD reporting requirements.

***Attachments***

- A. Orange County Transportation Authority Public Transportation Agency Safety Plan, July 2021 (Redlined)
- B. Public Transportation Agency Safety Plan Annual Review, June 2021

**Prepared by:**



Matthew DesRosier  
Department Manager, Health, Safety,  
and Environmental Compliance  
714-560-5854

**Approved by:**



Maggie McJilton  
Executive Director, Human Resources  
and Organizational Development  
714-560-5824



**ORANGE COUNTY  
TRANSPORTATION  
AUTHORITY**

**PUBLIC TRANSPORTATION AGENCY SAFETY PLAN**

**~~MAY 2020~~ JULY 2021**

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**PUBLIC TRANSPORTATION AGENCY SAFETY PLAN  
FOR THE  
ORANGE COUNTY TRANSPORTATION AUTHORITY**

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**PUBLIC TRANSPORTATION AGENCY SAFETY PLAN  
FOR THE  
ORANGE COUNTY TRANSPORTATION AUTHORITY**

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**EXECUTIVE SUMMARY**

Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) grants the Federal Transportation Administration (FTA) the authority, to establish and enforce a comprehensive framework to oversee the safety of public transportation throughout the United States. As a component of this safety oversight framework, recipients of FTA Chapter 53 funding are required to develop and implement a Public Transportation Agency Safety Plan (PTASP), Regulation 49 C.F.R. Part 673 based on Safety Management Systems (SMS) principles and methods.

On July 19, 2018, the FTA published the PTASP final rule, requiring certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement SMS. The goal of SMS is to increase the safety of transit systems by proactively identifying, assessing and controlling risks. Further, Regulation 49 C.F.R. Part 673 puts the FTA and the Orange County Transportation Authority (OCTA) in a position to provide guidance that strengthens the use of safety data to support management decisions, improves the commitment of transit leadership to safety, and fosters a culture of safety promoting awareness and responsiveness to safety risks.

SMS is a comprehensive, collaborative, proactive, and a data-driven approach to managing safety, thus bringing management and labor together to: better control risk, detect and correct safety issues in a timely manner, effectively share and analyze safety data, and precisely measure safety performance.

***Our Mission*** is to develop and deliver transportation solutions to enhance quality of life and keep Orange County moving.

***Our Vision*** is, an integrated and balanced transportation system that supports the diverse travel needs and reflects the character of Orange County.

OCTA is a public agency that conducts its business with integrity, in an honest and ethical manner. Our values consist of safety, integrity, customer focus, can-do spirit, communication and teamwork/partnership. OCTA keeps people moving by reducing freeway congestion, improving safety and efficiency on our local roads, providing bus service and regional multimodal connections, helping people find ways to leave their cars home, and providing safe, convenient transportation that is FTA and Americans with Disabilities Act (ADA) compliant to those with special accommodations. These values shape the way we do business and significantly influence who we are and how we want to be viewed by others.

OCTA has taken steps of creating an environment where safety culture is paramount by adopting safety as a core value. Individual efforts alone do not result in the desired outcome. A positive safety culture is achieved only when it develops an aggregate attitude that safety is paramount in all transit services. This type of safety thinking permits individuals to resist complacency, commit to excellence, and take personal accountability. The cumulative effect of these attitudes develops an organizational attitude of self-regulation for safety. It fosters a universal type of safety mindset.

Accordingly, safety culture is both attitudinal, as well as structural, and revolves around the common beliefs and actions of individuals and the organization. It consists not only of identifying safety issues, but also resolving them with appropriate actions.

OCTA is committed to Safety as a systematic and comprehensive approach to identifying hazards and risks and has adopted the SMS framework by establishing a safety policy; identifying hazards and controlling risks; setting goals and planning and measuring performance. OCTA uses SMS as means of agency-wide support for transit safety by establishing a culture where everyone is accountable for safety. The success of these efforts starts with senior executives and labor leadership visibly demonstrating their commitment to safety and leading by example to resolve safety issues.

The implementation of SMS, as described within this document, has been ongoing at OCTA through the execution of multiple activities, including:

- Extensive hazard identification, analysis and resolution;
- Increased internal auditing to ensure our processes are functioning as intended;
- Safety Outreach with the community – as good neighbors and partners with emergency management resources in the surrounding communities; and
- Focus on improved safety training for all employees – to ensure that OCTA is as safe as practical with the understanding that safety is everyone’s responsibility.

OCTA has developed and adopted this PTASP to comply with FTA regulations. OCTA’s Board of Directors, Accountable Executive, and Chief Safety Officer have reviewed and approved the PTASP through (resolution #-); assuring its content meets the requirements of Regulation 49 C.F.R. Part 673 through the establishment of a comprehensive SMS framework.



# **PUBLIC TRANSPORTATION AGENCY SAFETY PLAN FOR THE ORANGE COUNTY TRANSPORTATION AUTHORITY**

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## **DEFINITIONS**

**Source:** All definitions are official U.S. Department of Transportation, Federal Transit Administration definitions related to the Public Transportation Agency Safety Plan.

**Accident:** an event that involves any of the following: a loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.

**Accountable Executive:** a single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the Agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the Agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. § 5329(d), and the Agency's Transit Asset Management Plan in accordance with 49 U.S.C. § 5326.

**Change Control** - Is a method of maintaining the consistency and reliability of a system or product's performance, function, and design; and the control of changes made to the system or product throughout its life cycle.

**Change Control Committee** - The Change Control Committee is a group of staff members that represent various areas of expertise within OCTA. These staff members have been selected to be diverse in expertise and responsibility to ensure that all of OCTA's interests and objectives are met by each project.

**Chief Safety Officer:** an adequately trained individual who has responsibility for safety and reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. A Chief Safety Officer may not serve in other operational or maintenance capacities, unless the Chief Safety Officer is employed by a transit agency that is a small public transportation provider as defined in this part, or a public transportation provider that does not operate a rail fixed guideway public transportation system.

**Core Safety Responsibilities:** responsibilities, accountabilities, and authority of the accountable executive, the key safety officers, and key members of the safety management team.

**Desired Safety Outcomes or Goals:** safety outcomes for each risk using the measurable safety performance indicators established.

**Document Revision and Control:** a description of the regular annual process used to review and update the plan including a timeline for implementation of the process.

**Event:** any accident, incident, or occurrence.

**Hazard:** any real or potential condition that can cause injury, illness, death; damage to or loss of the facilities equipment, rolling stock, or infrastructure; or damage to the environment.

**Hazard Probability:** likelihood of a hazard consequence to occur.

**Hazard Severity:** the effect/damaging result of a hazards consequence.

**Incident:** an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

**Injury:** any damage or harm to persons that requires immediate medical attention away from the scene because of a reportable event. Agencies must report each person transported away from the scene for medical attention as an injury, whether or not the person appears to be injured.

**Occurrence:** an event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.

**Performance target:** a quantifiable level of performance or condition expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration.

**Policy Statement:** a statement establishing senior management commitment to continual safety improvement, signed by the executive accountable for the operation of the Agency and the board of directors.

**Prioritized Safety Risks:** a description of the most serious safety risks to the public, personnel and property.

**Reportable:** an event occurring on transit right-of-way, in a transit revenue facility, in a transit maintenance facility, or involving a transit revenue vehicle, excluding occupational safety events occurring in administrative buildings.

**Risk:** an assessed probability and severity calculation to classify the overall potential consequences of a hazard.

**Risk Control Strategies and Actions for Prioritized Safety Risks:** a description of risk control strategies and actions the Agency will undertake to minimize exposure of the public, personnel and property to hazards, including a schedule for implementing the risk control strategies and the primary entity responsible for each strategy.

**Safety Assurance:** a list of defined safety performance indicators for reach priority risk and associated targets the Agency will use to determine if it is achieving the specified safety goals.

**Safety Culture:** the product of individual and group values, attitudes, competencies and patterns of behavior that determine commitment to safety management. Four attributes of a positive safety culture:

***Reporting:*** encouraging employees to divulge information about hazards that they encounter

***Just:*** rewarding employees for providing essential safety-related information, and holding them accountable for deliberate violations of the rules

***Flexible:*** adapting to changing demands and reacting to events

***Learning:*** willing to change based on safety indicators and hazards uncovered through assessments, audits, data and incidents.

**Safety Performance Target:** a performance target related to safety management activities.

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**Safety Risk Management Approach:** the formal processes the agency uses to identify hazards, analyze and assess safety risks, and develop, implement and evaluate risk controls.

**Safety Training Program:** a comprehensive safety training program for agency staff that ensures staff are trained and competent to perform their safety duties.

**Serious Injury:** any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses); (3) Causes severe hemorrhages, nerve, muscle, or tendon damage; (4) Involves any internal organ; or (5) Involves second or third degree burns, or any burns affecting more than 5 percent of the body surface.

**Source: NTD Safety and Security Reporting Manual**

**Fatality:** a death or suicide confirmed within 30 days of a reported event. Does not include deaths in or on transit property that are a result of illness or other natural causes; a death due to, Collision (including suicides), Fire, Hazardous material spill, Acts of God, System or personal security event (including suicides), and Other safety events.

**Source: National Public Transportation Plan Performance Measures**

**Fatalities:** total number of reportable fatalities and rate per total vehicle revenue miles by mode.

**Injuries:** total number of reportable injuries and rate per total vehicle revenue miles by mode.

**Safety Events:** total number of reportable events and rate per total vehicle revenue miles by mode.

**Other Safety Events:** include but are not limited to slips, trips, falls, smoke, power failure, maintenance-related issues, or electric shock. To be reported as a major event, these events must **either** meet the fatality, evacuation, or property damage threshold **or** result in two or more injured persons. Other Safety Events that cause only one person to be immediately transported from the scene for medical attention, and that do not trigger any other reporting threshold, are reported on the Non-Major Monthly Summary Report form. The FTA includes Other Safety Events that occur in a transit maintenance facility and meet a reporting threshold but continues to exclude occupational safety events occurring in administrative buildings.

***Note:** Definitions from the U.S. Department of Transportation, Federal Transit Administration should be applied uniformly across the entire agency, to ensure safety performance measures are accurate agency wide and SMS is applied systematically.*

## ACRONYMS

ADA	Americans with Disabilities Act
ART	Annual Required Training
BSSPP	Bus System Safety Program Plan
CAP	Corrective Action Plan
CEO	Chief Executive Officer
CFR	Code of Federal Regulations
<del>CCMP</del>	<del>Configuration Management</del> <del>Change Control</del> Plan
COOP	Continuity of Operations Plan
CPUC	California Public Utilities Commission
CSO	Chief Safety Officer
EOC	Emergency Operations Center
FAST	Fixing America's Surface Transportation Act
FTA	Federal Transportation Administration
HR	Human Resources
HROD	Human Resources and Organizational Development Division
HSEC	Health, Safety and Environmental Compliance Department
IIPP	Injury and Illness Prevention Program
LMS	Learning Management System
MAP-21	Moving Ahead for Progress in the 21 <sup>st</sup> Century
MPO	Metropolitan Planning Organization
NPTSP	National Public Transportation Safety Plan
NTD	National Transit Database
NTSB	National Transportation Safety Board
OC	Orange County
OCTA	Orange County Transportation Authority
OHA	Operating Hazard Analysis
OSHA	Occupational Health and Safety Administration
<del>OTSORIGAMI</del>	<del>Occurrence Tracking System</del>
PHA	Preliminary Hazard Analysis
PTASP	Public Transportation Agency Safety Plan
Ri2	Routes Issues and Information Reporting Program
SCAG	Southern California Association of Governments
SCOT	Student Coach Operator Training
SMS	Safety Management System
SRM	Safety Risk Management
SOP	Standard Operating Procedure
SSCP	Safety and Security Certification Plan
SSEPP	Security Emergency Preparedness Plan
SSHA	Sub-System Hazard Analysis
SSOA	State Safety Oversight Agency
SSO	State Safety Oversight
TAM	Transit Asset Management
USC	United States Code

# **PUBLIC TRANSPORTATION AGENCY SAFETY PLAN FOR THE ORANGE COUNTY TRANSPORTATION AUTHORITY**

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## **1. INTRODUCTION**

OCTA was created in 1991, consolidating the functions of seven separate transportation agencies, including the Orange County Transportation Commission, the Orange County Transit District, the Consolidated Transportation Services Agency, the Orange County Local Transportation Authority, the Orange County Service Authority for Freeway Emergencies, the Orange County Congestion Management Agency and the Orange County Service Authority for Abandoned Vehicles. OCTA is served by 17 Board Members.

OCTA's 17-member Board of Directors consists of five County Supervisors, ten city members, and two public members. The District Director of the California Department of Transportation, District 12, serves as an Ex-officio member. Board of Supervisors are elected by Supervisorial Districts to a four-year term. City Members are appointed by the Orange County City Selection Committee to a two-year term. Public Members are appointed by OCTA Board of Directors to a four-year term. Ex-officio Member, Caltrans District 12, District Director, is appointed by the Governor to a four-year term Public Utilities Code Sec. 130052(d).

The Chief Executive Officer (CEO) reports directly to the OCTA Board of Directors; the Deputy CEO reports to the CEO and is tasked with the duties of "acting CEO" in the absence of the CEO. The Deputy CEO is also tasked with reporting to the Board of Directors in the CEO's absence. The CEO is responsible for the daily management of all systems operated by OCTA and ensures federal, state, local, and agency safety requirements are being met.

### *Facilities and Bus Facilities:*

OCTA owns and maintains five maintenance and operating bases, eight transportation centers, and one administration location that supports the bus bases and transportation centers. Additionally, there are support facilities, terminals, Park-N-Ride terminals, employee parking ~~lots~~Origami, surplus properties, communications, and other miscellaneous locations. The facilities are comprised of 47 buildings and structures totaling over 400,000 square feet. The structures are situated on 80 acres of property throughout Orange County with an initial capital cost of more than \$50 million dollars.

The primary physical elements of the OCTA bus system are facilities and buses. The five maintenance and operating bases operate 24 hours per day, seven days a week, 365 days a year. The five bases are as follows:

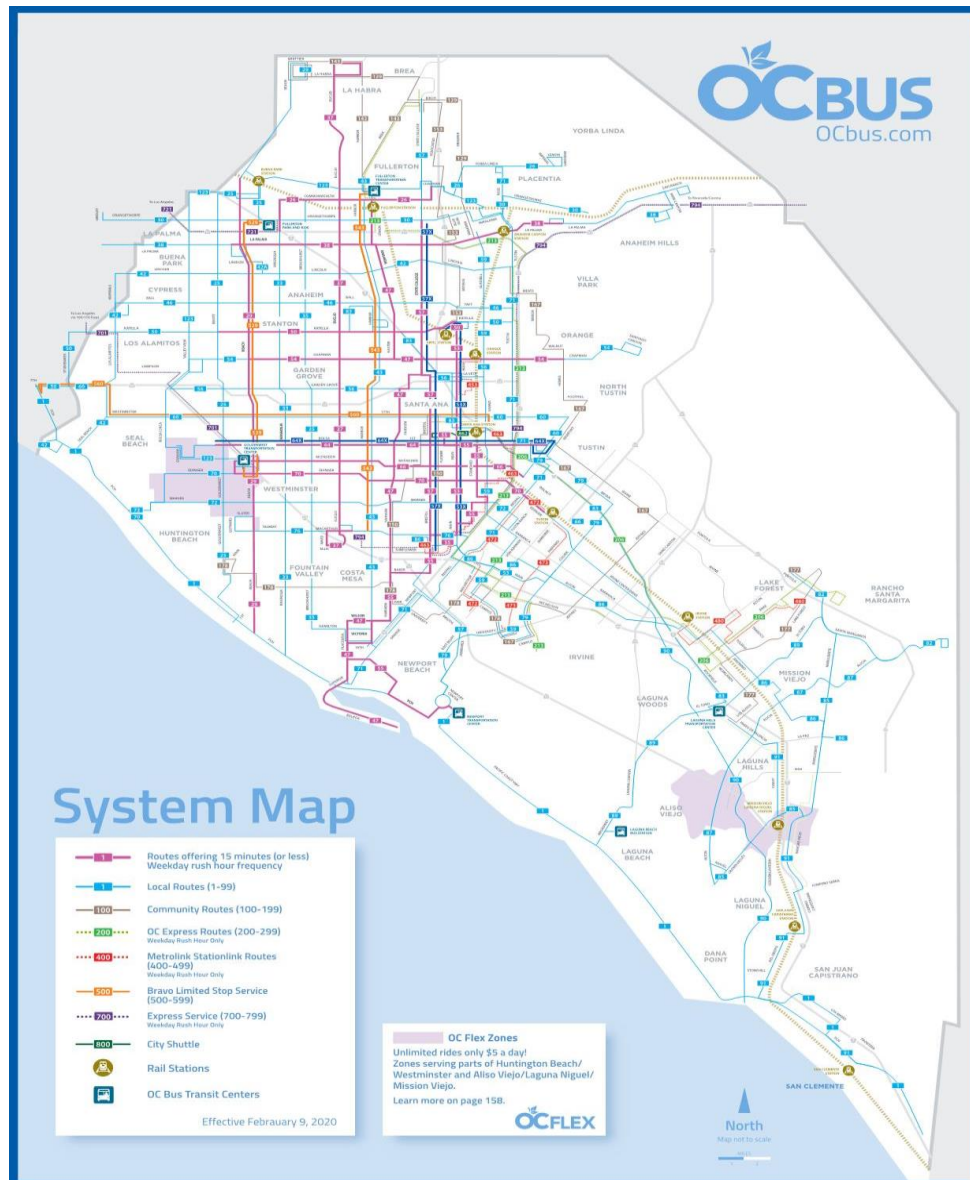
- Base 1-Santa Ana;
- Base 2-Irvine Construction Circle (Paratransit);
- Base 4-Garden Grove;
- Base 6-Anaheim (Contracted Fixed Route); and
- Base 7-Irvine Sand Canyon (Contracted Fixed Route).

## Bus Service and System Description

OCTA's bus system offers 58 routes and over 5,000 bus stops which operate over a 798 square-mile area, in 34 cities and unincorporated areas. OCTA routes include local and community routes which travel between cities, express routes which travel on freeways, OC Flex on-demand service, and Stationlink service that connects Orange County Metrolink stations with major employment centers. Figure 1 depicts the OCTA system map.

**Figure 1**

### THE OCTA SYSTEM MAP





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**2. TRANSIT AGENCY INFORMATION**

<b>Transit Agency Name</b>	Orange County Transportation Authority- OCTA		
<b>Transit Agency Address</b>	550 South Main Street Orange, CA 92868		
<b>Name and Title of Accountable Executive</b>	Darrell E. Johnson, OCTA Chief Executive Officer		
<b>Name of Chief Safety Officer or SMS Executive</b>	Matthew DesRosier		
<b>Mode(s) of Service Covered by This Plan</b>	Bus and Paratransit: Directly Operated and Contracted	<b>List all FTA Funding Types</b>	5307, 5309, 5310, 5337, and 5339
<b>Mode(s) of Service Provided by the Transit Agency (Directly operated or contracted service)</b>	Commuter Bus, Bus, Vanpool, Demand Response, Demand Response Taxi, and Paratransit services.		
<b>Does the agency provide transit services on behalf of another agency or entity?</b>	Yes <input checked="checked" type="checkbox"/> No <input type="checkbox"/> Description of Arrangements: OCTA operates fixed-route service for the Irvine iShuttle; and operates ADA service the Laguna Beach Trolley, Anaheim Transit Network, iShuttle, and Project V community shuttles.		
<b>Name and Address of Transit Agency(ies) or Entity(ies) for Which Service Is Provided</b>	N/A		

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**3. PLAN DEVELOPMENT, APPROVAL, AND UPDATES**

<b>Name of Entity That Drafted This Plan</b>	Orange County Transportation Authority	
	<b>Signature of Accountable Executive</b>	<b>Date of Signature</b>
<b>Signature by Accountable Executive</b>		
<b>Approval by the Board of Directors or an Equivalent Authority</b>	<b>Name of Individual/Entity That Approved This Plan</b>	<b>Date of Approval</b>
	OCTA Executive Committee	<del>May 4, 2020</del>
	OCTA Board of Directors	<del>May 11, 2020</del>
	<b>Relevant Documentation (title and location)</b>	
	<b>Name of Individual Entity That Certified This Plan</b>	<b>Date of Certification</b>
Matthew DesRosier (CSO)	<del>May 11, 2020</del>	
<b>Certification of Compliance</b>	<b>Relevant Documentation (title and location)</b>	

<b>Version Number and Updates</b> Record the complete history of successive versions of this plan.			
<b>Version Number</b>	<b>Section/Pages Affected</b>	<b>Reason for Change</b>	<b>Date Issued</b>
<u>2</u>	<u>19,-33, 37, 40, 45, 52, 56, 61</u>	<u>Appendix A, OTS Process, Configuration Process Updates</u>	<u>06/30/2021</u>

### **Annual Review and Update of the Public Transportation Agency Safety Plan**

Due to the implementation of 49 CFR Part 673, OCTA is required to annually submit the current PTASP to the Board of Directors for review and approval, along with an annual safety report. The annual review of the PTASP will be conducted by the Accountable Executive, the Chief Safety Officer and the SMS Program Manager each fiscal year, no later than June 30. No proposed change will be incorporated into the PTASP until it has been approved by the CEO and the Board of Directors. Annual review and updating of the PTASP will consist of the CEO signing and dating this document and submitting to the Board of Directors for review. All changes to the PTASP are recorded in the PTASP Activity Log; displaying the version number, section/pages affected, the reason for change and the date of the change.

Necessary updates outside the annual update will be bulletins, which will be incorporated in the body of the PTASP each year for approval. Any division Executive Director or other official may submit a proposed change at any time for review and adoption. Proposed changes are submitted to the Chief Safety Officer and a determination is made whether to convene a special SMS/PTASP Committee meeting, or to include the matter on the agenda for the regular SMS/PTASP Committee monthly meeting.

## Management's Commitment

The individuals signing this PTASP, attest all items and conditions contained in this plan are understood, accepted, recommended, and supported; they are committed to implementing the PTASP and achieving its safety goals and objectives.



Jennifer L Bergener, Deputy Chief Executive Officer,  
Chief Operations Officer

4/27/2020

Date



Andrew Oftelie, Chief Financial Officer

4/24/2020

Date



Beth McCormick, Executive Director of Bus Operations

4/24/2020

Date



Maggie McJilton, Executive Director, HROD

4/24/2020

Date



Jim Beil, Executive Director, Capital Programs

4/24/2020

Date



Maggie McJilton, Executive Director, External Affairs

4/24/2020

Date



Kia Mortazavi, Executive Director, Planning

4/27/2020

Date



Matt DesRosier, Manager, Health, Safety  
& Environ. Compliance, Chief Safety Officer

4/24/2020

Date

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**4. SAFETY PERFORMANCE TARGETS**

Safety Performance Management is a critical tool that supports OCTA in identifying safety concerns and monitoring progress in safety improvements. OCTA has developed the following Safety Performance Targets to focus on its commitment to safety and meet federal requirements.

	Objective	Metric	Baseline	Target
<b>Bus</b>	Reduce Fatalities	Fatalities per 100K VRM	0.00	Maintain
	Reduce Injuries	Injuries per 100K VRM	0.59	Maintain
	Reduce Safety Events	Safety Events per 100K VRM	1.03	Maintain
	Maintain System Reliability	Miles between Road Calls	1 per 14K VRM	Maintain

\*Safety Performance Targets are calculated on the calendar year.

Annual Safety Performance Targets (Based on safety performance measures under NSP)							
Mode	Fatalities (Total)	Fatalities Per 100k VRM	Injuries (Total)	Injuries Per 100k VRM	Safety Events (Total)	Safety Events Per 100k VRM	System Reliability (Failures/VRM)
<b>Bus</b>	0	0.00	81	0.59	133	1.03	1/14,000 <del>827</del>
	Objective		Metric		Baseline		Target
<b>Paratransit</b>	Reduce Fatalities		Fatalities per 100K VRM		0.00		Maintain
	Reduce Injuries		Injuries per 100K VRM		0.00		Maintain
	Reduce Safety Events		Safety Events per 100K VRM		0.00		Maintain
	Maintain System Reliability		Miles between Road Calls		1 per 14K VRM		Maintain

\*Safety Performance Targets are calculated on the calendar year.

Annual Safety Performance Targets (Based on safety performance measures under NSP)							
Mode	Fatalities (Total)	Fatalities Per 100k VRM	Injuries (Total)	Injuries Per 100k VRM	Safety Events (Total)	Safety Events Per 100k VRM	System Reliability (Failures/VRM)
<b>Paratransit</b>	0	0.00	0	0.00	0	0.00	1/25,000 <del>14,827</del>

**Safety Performance Target Coordination**

Describe the coordination with the State and Metropolitan Planning Organization(s) (MPO) in the selection of State and MPO safety performance targets		
OCTA will foster agency-wide support for transit safety and will provide copies of their PTASP and additional information as requested to Southern California Association of Governments (SCAG) and California Public Utilities Commission (CPUC). Additionally, OCTA will evaluate agency Safety Performance Targets annually; the updated targets will be shared with the SCAG, and CPUC.		
Targets Transmitted to the State	State Entity Name	Date Targets Transmitted
	CPUC	<u>May 22, 2021</u>
Targets Transmitted to the Metropolitan Planning Organization(s)	Metropolitan Planning Organization Name	Date Targets Transmitted
	SCAG	<u>May 22, 2021</u>

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**5. SAFETY MANAGEMENT POLICY (673.23)**

**5.1 Safety Management Policy Statement- 673.23 (a)**

OCTA is committed to developing, implementing, maintaining, and constantly improving processes to make sure all transit service delivery activities take place under a balanced allocation of organizational resources, aimed at achieving the highest level of safety performance and meeting standards. All levels of management and employees are accountable for the delivery of the highest level of safety performance, starting with the OCTA CEO.

OCTA managers, personnel, and outside contractors are responsible for promoting the safety of customers, employees, property and the public who encounter OCTA's transit services. Every employee must practice workplace safety, use equipment, tools and materials properly, and be trained in the work rules and procedures for their area of responsibility, including contingency plans for abnormal and emergency conditions. Each employee and contractor shall take an active part in the hazard identification and reporting process.

OCTA is committed to:

- Support the management of safety through the provision of appropriate resources to result in an organizational culture that fosters safe practices, encourages effective employee safety reporting and communication, and actively manages safety with the same attention to results as paid to other management systems of the organization;
- Integrate the management of safety as a primary responsibility of all managers and employees;
- Clearly define for all staff, managers and employees alike, their accountability and responsibility for the delivery of the organization's safety performance and the overall performance of OCTA's safety management system;
- Establish and operate hazard identification and analysis, and safety risk evaluation activities, including an employee safety reporting program as a fundamental source for safety concerns and hazard identification. Eliminate or mitigate safety risks and hazardous consequences resulting from OCTA's operations or activities to a level that is acceptable and consistent with safety performance;
- Ensure no action will be taken against any employee who discloses a safety concern through the employee safety reporting program, unless disclosure indicates, an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures;
- Comply with, and wherever possible exceed, legislative and regulatory requirements and standards;

- Ensure sufficiently skilled and trained HROD staff are available to implement safety management processes;
- Ensure all staff are provided with adequate and appropriate safety-related information and training, are competent in safety management matters, and are allocated only tasks commensurate with their skills;
- Establish and measure OCTA's safety performance against realistic and data-driven safety performance indicators and safety performance targets;
- Continually improve OCTA's safety performance through management processes that ensure appropriate safety management action is taken and is effective; and
- Ensure externally supplied systems and services to support OCTA's operations are delivered to meet OCTA's safety performance standards.

## **5.2 Process for Reporting Unsafe Conditions-673.23(b)**

Employees are required to embrace OCTA's safety goals and objectives and encouraged to report safety concerns, issues or hazards. OCTA's employees have a duty to report any unsafe condition to their supervisor, manager, Safety staff, the Accountable Executive or the SMS Program Manager. The Safety staff works with managers and employees to facilitate the reporting of hazards using email, telephone, and in-person reporting. Moreover, employees may report safety concerns, issues or hazards through the safety department intranet page, Ri2, and Ethicspoint, OCTA's ethics hotline.

### OCTA Health, Safety & Environmental Compliance Intranet Page

OCTA intranet homepage provides employees with links to the intranet pages for each division in the agency. By selecting "Organization" on the main menu bar and then scrolling to appropriate division, employees have access to the that division's intranet page. On the Health Safety and Environmental Compliance page employees may use the "Big Red Button" to submit a safety concern or get access to safety policies and information. The reporting of unsafe conditions through the "Big Red Button" are managed by the CSO and is a closed loop process that is resolved within 14 business days.

Routes Issues and Information Reporting Program (Ri2) affords OCTA employees the ability to enter information related to safety concerns, issues, or hazards into an electronic reporting forum. OCTA responds to Ri2 submissions and typically resolves the report within 14 business days. During the resolution process employees have the ability to log in and check the progress or status of their Ri2 submission.

OCTA's Ethicspoint number is available for any employee, outside contractor, or member of the public to anonymously report any safety hazards, suspected fraud, waste, abuse, illegal or unethical behavior. The report is confidential. Reports to Ethicspoint will be administered by Internal Audit for review and investigation by the appropriate department.

OCTA is committed to fair treatment of all its employees and recognizes its responsibility under state and federal law to protect from punishment and harassment any person who reports an issue, whether the allegation is found to have merit. OCTA shall not take any action or threaten any action against any employee as a reprisal for making a report unless the report was made, or the information was disclosed with the knowledge that it was false or with willful disregard for its truth or falsity. Policy violations will be managed through OCTA's Human Resources Department.

### **5.3 Safety Management Policy Communication-673.23(c)**

OCTA staff are informed of their responsibilities related to safety and SMS during onboarding, within their individual job descriptions, and receive an annual performance evaluation that includes safety related evaluation criteria. Additionally, each employee is required to acknowledge through signature that they have received a written copy of OCTA's Safety Management Policy Statement. Signed copies will be filed within individual employee files. OCTA will provide additional safety information via the Intranet; newsletters, safety bulletins, and audio-visual monitors in break rooms.

### **5.4 Authorities, Accountabilities, and Responsibilities-673.23(d)**

The purpose of the PTASP is to: maintain a formal Safety Program and establish a coordinated safety effort responsive to the needs of the operating and support departments, make sure all personnel and contractors are working toward the common goal of minimizing the occurrence of customer and employee incidents by providing safe revenue service to our customers and a safe work environment for our employees.

#### *Board of Directors*

The 17-member Board of Directors receives staff reports and considers staff recommendations that have the potential to impact operational safety. The Board of Directors makes policy level decisions and follows established protocol for voting on actions that guide OCTA's operations. OCTA Board Members also serve on smaller committees, which are intended to provide more detailed information and specifically focus on different functional areas of OCTA. The various Board committees that review and recommend actions that have potential safety and environmental impacts include the Executive Committee, which safety related items are brought before, the Legislative and Communications Committee, the Regional Planning and Highways Committee, and the Transit Committee.

#### *Executive Staff*

Executive staff refers to the Chief Executive Officer, Deputy Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Division Executive Directors, and Division Directors. The CEO is the OCTA Accountable Executive and reports directly to the OCTA Board of Directors; the Deputy CEO reports to the CEO and is tasked with the duties of "acting CEO" in the absence of the CEO. The Deputy CEO is also tasked with reporting to the Board of Directors in the CEO's absence. The CEO is responsible for the daily management of all systems operated by OCTA and ensures federal, state, local, and agency safety requirements are being met. CSO

and Executive staff directs the utilization of available resources as necessary to achieve safety goals and objectives. This management level exercises approval authority for major system modifications and facilitates coordination of safety efforts.

### *Divisions/Departments*

Human Resources and Organizational Development Division– Led by the Executive Director of Human Resources and Organizational Development (HROD), is responsible for planning, directing, and evaluating the effectiveness of all the Human Resources and Organizational Development Division systems, policies and practices, as well as related administrative functions. HROD directs the overall programs/activities of the Human Resources Department, which includes Labor & Employee Relations, EEO/ Affirmative Action, ADA general program and Title VI, Learning & Development Department, Risk Management Department, and Health, Safety, and Environmental Compliance Department.

Operations Division – Led by the Chief Operating Officer, is responsible for all operational functions in the authority: bus, streetcar, rail, on-demand services and mobility paratransit. Operations provides highly complex and responsible direction for multiple transit departments and administrative programs. Operations is also responsible for creating policy and strategic direction as well as planning to the operational functions of the Authority.

Planning Division – Led by the Executive Director of Planning, is responsible for ensuring the coordination of activities and integration of effort. Oversees, evaluates, and manages the work of agency staff and contractors conducting the strategic planning, policy development, environmental studies, design, and community relations activities to deliver highly complex multi-modal transportation planning. Planning is also responsible for creating policy and strategic direction as well as planning, directing, and evaluating the effectiveness of all Planning Division’s systems, policies and practices, and related functions.

Finance & Administration Division – Led by the Chief Financial Officer, is responsible for the direction of the overall programs/activities of the Treasury Department, Contracts Administration and Materials Management, Accounting and Financial Reporting, Financial Planning and Analysis, General Services, and leads the Finance and Information Systems.

Capital Programs Division – Led by the Executive Director of Capital Programs, is responsible for the oversight, evaluation, and management of the division’s activities to deliver highly complex multi-modal transportation rail, high speed rail, and highway programs. The division is also responsible for creating policy and strategic direction as well as planning, directing, delivering, and evaluating the effectiveness of all division systems, policies and practices, and related functions.

External Affairs Division– Led by the Executive Director of External Affairs, is responsible for marketing and public outreach programs in support of OCTA projects, services and initiatives. External Affairs directs communications programs during development and construction of transportation projects, oversees bus and rail transit marketing and customer engagement, and diversity outreach and economic opportunity programs.

Government Relations Division – Led by the Executive Director of Government Relations, is comprised of State and Federal Relations, a Grants section, and the Regional Initiatives Department. The Government Relations Division is responsible for monitoring, analyzing, and responding to government actions and decisions that affect how OCTA receives funding, plans for projects and delivers services. Government Relations also maintains an active presence at all levels of government to ensure OCTA's interests are well represented in these various forums.

### ***Positions***

#### **Directors, Managers Roles and Responsibilities**

All directors and managers are accountable and responsible for:

- implementing the safety risk management, safety assurance, and safety training and communication protocols of their department;
- safety performance within their functional areas;
- ensuring procedures are consistent with the SMS;
- determining and implementing countermeasures required to counteract safety risks and manage issues that negatively impact OCTA safety performance;
- ensuring that all employees are trained in SMS;
- supporting and requiring employees within their department to participate in safety training activities;
- integrating SRM into existing processes;
- requiring that all relevant safety information is communicated and used in decision-making;
- providing information to the CEO, COO, Executive Directors, and HSEC, as appropriate;
- ensuring that all system changes are coordinated with HSEC and documented; and
- cooperating with and providing support for evaluations and audits conducted by HSEC.

#### **Supervisor Roles and Responsibilities**

Supervisors are accountable and responsible for:

- the safety performance of all personnel and equipment under their supervision;
- implementing and maintaining safety-related control measures/mitigations;
- familiarizing employees with the safety requirements and hazards associated with the work to be performed;
- responding to identified hazards that may impact safety performance;
- reporting all mishaps and incidents to HSEC;
- sharing lessons learned from incidents; and
- implementing and adhering to SMS procedures and processes within their span of control.

## **Employee Responsibilities**

All OCTA employees are responsible for:

- becoming familiar with the safety procedures for their assigned work activity;
- performing their work safely;
- following procedures and rules;
- calling attention to hazards that may impact safety performance; and
- reporting mishaps and incidents to their Supervisor, in accordance with established requirements for the protection of themselves, co-workers, customers, facilities, and equipment.

## *Contractors*

OCTA is responsible for facilitating communication between internal stakeholders and outside contractors. All contractors are responsible for compliance with this PTASP and 49 CFR Part 673. The contractor is responsible for collecting, reviewing for accuracy, and submitting contract/performance related information and data to OCTA Operations Management monthly. The contractor is required to comply with all OCTA SMS policies and procedures, reporting and submission requirements, including those required for Hazard Identification and Analysis, the NTD submission, and preparing all required data for OCTA to report. OCTA's SMS Program Manager will receive SMS data from OCTA contractors, per the agreed upon schedule; monitor and measure the contractor's safety performance through the data provided and report to the Chief Safety Officer and the PTASP SMS Committee quarterly.

Additionally, the contractor must provide OCTA access to all work, materials, payroll, and other data, records, and accounts maintained by the contractor for auditing purposes. Any audit findings requiring corrective action must be corrected by the contractor and checked by OCTA to ensure they have been corrected.

Contractors are required to provide training to employees on a scheduled basis, to include refresher training. The Contractor is required to make sure that their staff receives training applicable to requirements of jobs performed. Training is related to knowledge and operation of equipment, dealing with the public, sensitivity to persons with disabilities, knowledge of various kinds of disabilities, rules and procedures of OCTA services, and other areas of knowledge and proficiency which, shall enable personnel to perform their jobs and meet the requirements of the Contract. OCTA reserves the right to audit training activities at its discretion.

## *Lines of Authority for Safety:*

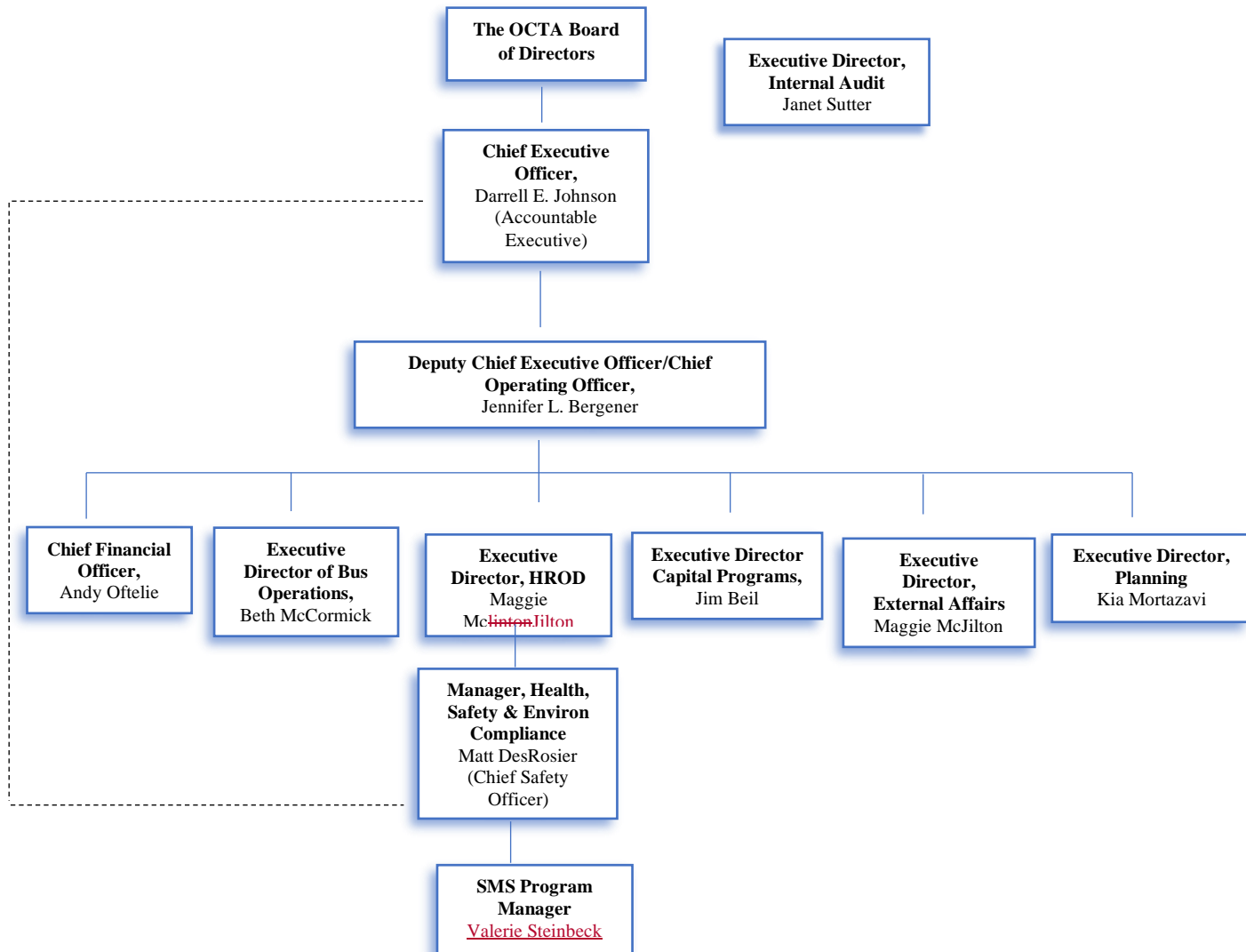
The Health, Safety, & Environmental Department, led by the Health, Safety, & Environmental Compliance Manager/CSO, reports directly to the CEO through a dotted line and reports administratively daily to the Executive Director of HROD. The Health, Safety, & Environmental Compliance Manager/CSO, is responsible for the development, implementation and administration of environmental, health, safety and sustainability policies, procedures, and programs designed to ensure regulatory compliance, minimize hazards and promote a culture of safety and sustainability. Provides leadership, technical expertise and strategic planning for implementing employee safety programs, fleet and construction safety, wellness, and

environmental compliance. Assists all departments in maintaining a safe and secure environment by providing guidance in identifying and evaluating hazards and vulnerabilities and minimizing the hazardous conditions and/or vulnerabilities to their lowest achievable level.

The CSO oversees SMS, the SMS Program Manager, and is the chair of the SMS/PTASP Committee. The HSEC Department consists of a the CSO, SMS Program Manager, and safety staff to achieve its safety responsibilities as outlined in this document.

**Figure 2**

**Executive Management Reporting**



Source: The Orange County Transportation Authority

### *Chief Safety Officer (CSO)*

The CSO takes a proactive approach by performing the following activities:

- Manages and implements the Public Transit Agency Safety Plan, as well as answers any questions regarding the Agency's Transit Safety Plan;
- Chairs the SMS/PTASP Committee meetings;
- Leads OCTA in the implementation of the Safety Management System throughout the Agency;
- Participates in formal meetings with the FTA, CEO and other OCTA management on safety issues;
- Reports Safety Performance Measures/Targets to the MPO; and
- Develops and implements safety policies, procedures, and programs risk identification, evaluation, control, funding, and administration.

### *SMS Program Manager*

Assists the CSO in all functions and takes the lead in the following safety functions:

- Co-Chairs the SMS/PTASP Committee meetings;
- Promotes and coordinates the Safety Management System methodology within the Agency;
- Participates in formal meetings with the FTA, CEO and other management on safety issues;
- Investigates employee and vehicle accidents, incidents, and injuries; assists in developing programs to reduce injuries;
- Serves as OCTA's main contact with other agencies related to safety programs and procedures and prepares case records, documents, and data required by such agencies;
- Compiles and analyzes safety statistics; produces reports, records, documents, and manifests; accesses and updates database files;
- Coordinates staff safety meetings and attends meetings, conferences and group functions related to safety;
- Conducts training sessions relating to safety;
- Identifies health and safety concerns, analyzes reports and information, develops programs for accident/injury prevention, and submits recommendations to reduce frequency of accidents;
- Identifies safety concerns and issues, and participates in the design and implementation of safety policies and procedures;
- Performs hazard analyses as necessary;
- Tracks hazards and corrective actions; and
- Performs other job-related duties, as directed.

To ensure transit operations are conducted in the safest manner possible, all appropriate personnel have been assigned Safety and SMS related responsibilities, Table 1: Safety Roles and SMS Responsibilities. In addition, within OCTA, each department/function provides distinct roles and carries out specific responsibilities to ensure the safety of passengers, employees, local responders, and the community served.



Table 1

## Safety Task Roles and Responsibilities

SAFETY TASKS	SSO	Accountable Executive / Executive Dept.	Operations Management	Safety	Security and EP	Finance / CAMM	TTS / Engineering	HROD / Risk Management	Planning & Development	Internal Audit	D-Daily M-Monthly Q-Quarterly Y-Yearly AR-As Required
Safety Management Policy Statement	A	P	P	P	S	S	S	S	S	S	AR
Develop PTASP	A	P	P	P	RC	RC	RC	RC	RC	RC	AR
Update PTASP	A	P	P	P	RC	RC	RC	RC	RC	RC	AR
Liaison with SSO	N/A	S	S	P	S	S	S	S	S	S	AR
External PTASP Audits	P	S	S	P	S	S	S	S	S	S	AR
Conduct Internal Safety Assessment/Audits	A	A	S	P	S	S	S	S	S	P	Y
Internal Safety Reporting and Program Monitoring	A	S	S	P	S	S	S	S	S	S	AR
Safety/Security Certification	RC	A	P	P	P	S	P	S	S	S	AR
Develop Emergency Response Plans	A	A	S	S	P	S	S	S	S	S	Y
Safety Hazard, Near-Miss, and Incident Identification and Reporting	RC	P	P	P	P	P	P	P	P	P	AR
Collect and analyze all safety data and measurements	RC	S	P	P	S	S	S	S	S	S	AR
Collect and analyze all security data and measurements	RC	S	P	S	P	S	S	S	S	S	D
Maintain Database of safety statistics, measurements, trends	RC	S	P	P	S	S	S	S	S	S	D
Maintain Database of security statistics, measurements, trends	RC	S	P	S	P	S	S	S	S	S	D
Issue Accident/Incident Statistics and Reports	A	S	S	P	P	S	S	S	S	S	D
Review Passenger Accident Trends	RC	S	P	S	S	S	S	S	S	S	M
Conduct Accident/Incident Investigations	A	A	P	P	P	S	S	S	S	S	AR
Report required threshold Accidents to Outside Agencies (SSO, FTA)	A	A	P	P	S	S	S	S	S	S	AR
Safety Risk Assessments	RC	A	P	P	P	P	P	S	P	S	AR

SAFETY TASKS	SSO	Accountable Executive / Executive Dept.	Operations Management	Safety	Security and EP	Finance / CAMM	TTS / Engineering	HROD / Risk Management	Planning & Development	Internal Audit	D-Daily M-Monthly Q-Quarterly Y-Yearly AR-As Required
Hazard/Risk Management and Mitigations	A	S	P	P	P	S	P	S	P	S	AR
Design Reviews	RC	S	P	P	P	S	P	S	P	S	AR
<del>Management of Change/Configuration Management</del> <u>Change Control</u>	N/A	S	P	S	S	S	P	S	S	S	AR
Safety Training Program	RC	A	P	P	S	S	S	S	S	S	AR
Security Training Program	RC	A	P	S	P	S	S	S	S	S	AR
Safety Communication	RC	S	P	P	P	S	P	S	S	S	AR
Occupational Safety and Health Program Compliance	RC	P	P	P	S	S	S	S	S	S	AR
Security and Emergency Response Program Compliance	RC	P	P	P	P	S	S	S	S	S	AR
Maintain accident record keeping, employee injury reporting forms, and related data	RC	S	S	P	S	S	S	S	S	S	AR
Provide claims administration and investigation	RC	S	S	S	S	S	S	P	S	S	D
Corrective Action Plans	A	S	P	P	P	S	P	S	S	S	D
Contractor Oversight and Compliance Assurance	RC	S	S	P	S	S	S	S	S	S	AR
PTASP Documentation Control	RC	S	S	P	S	S	S	S	S	S	AR

## Legend:

<b>A</b>	<b>Approval</b>	The identified participant(s) is (are) responsible for approval of specified documentation
<b>P</b>	<b>Primary Task Responsibility</b>	The identified participant(s) is (are) responsible for the preparation of the specified documentation.
<b>S</b>	<b>Secondary or Support Task Responsibility</b>	The identified participant(s) is (are) to provide the necessary support to accomplish and document the task.
<b>RC</b>	<b>Review and Comment Responsibility</b>	The identified participant(s) may review and provide comments on the task or requirement.

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**6. SAFETY RISK MANAGEMENT (673.25)**

**6.1 Safety Risk Management Process 673.25(a)**

Safety Risk Management promotes the identification of hazards before they escalate into accidents or incidents, assesses safety risk, and establishes necessary mitigations. The Safety Risk Management process is comprised of the following activities: safety hazard identification, safety risk assessment, and safety risk mitigation.

**6.2 Safety Hazard Identification 673.25(b)**

Hazard identification and resolution is a core element of the PTASP/SMS emphasizing timely correction of unsafe conditions, anticipated and reconciled before serious accident, injury, or damage occurs. OCTA has the following hazard identification sources in place:

- Employee safety reporting;
- Safety observations;
- Inspections;
- Internal audits;
- Internal safety investigations;
- Accident reports;
- Compliance programs;
- PTASP/SMS committee reviews;
- SMS data/Industry data;
- State and federal government sources (including CPUC and FTA); and
- Public feedback/complaints.

The objective of hazard identification and analysis is to identify and define as many hazardous conditions as possible and enter them into the Hazard Resolution process before those conditions or associated actions cause or contribute to an accident. Hazard identification is accomplished through on-site hazard identification, hazard reporting, and/or as each Department or Base Manager collects and analyzes data to monitor trends. Departmental and Base Managers are responsible for investigating hazards and resolving such hazards within their departments utilizing the Hazard Management Process- Identification/Analysis delineated in Appendix B. When hazards cannot be resolved within the department, the Safety Department, CSO, and Accountable Executive are consulted for resolution.

Data gathered within each department is used to set the agenda for PTASP/SMS Committee meetings, where hazard data is discussed, evaluated, and disseminated to each representative departmental manager for use interdepartmentally and agency wide. The SMS Program Manager is responsible for preparing monthly data and trend analysis reports which are reviewed at monthly PTASP/SMS Committee meetings. The monthly report(s) are distributed throughout OCTA as part of Safety Promotion / Communication strategies.

OCTA documents hazards that develop through multiple sources, such as: employee reporting, accidents, incidents, and leading or lagging indicators. OCTA also evaluates hazards to determine if multiple events occurred leading up to an event. This ensures each possible cause is evaluated and documented for trending purposes.

### **6.3 Safety Risk Assessment 673.25(c)**

OCTA's Hazard Analysis Process establishes processes to assess the safety risks associated with identified hazards. The process assesses the safety risk based upon predicted probability and severity of a hazard's potential consequences.

The probability that a hazard will occur during the planned life expectancy of the system element, subsystem, or component can be described subjectively in potential occurrences per unit of time, event, population, items, or activity. Supporting rationale for assigning a hazard probability are documented in hazard analysis reports.

The severity of a hazard is defined to provide a qualitative measure of the worst credible mishap resulting from operational risks; personnel error; environmental conditions; design inadequacies; and procedural deficiencies for a system, subsystem, or component failure or malfunction.

#### **Safety Risk Assessment Request Process**

The process allows OCTA employees to submit safety concerns, as a non-punitive safety reporting system. Hazards that are deemed by Operations and/or HSEC to be an immediate threat to safety, for example poor footing in walk areas, are expected to be immediately corrected. The process is as follows:

1. Employee reports hazard to supervisor/manager – employee enters request through the safety department intranet site, Ri2, or the Ethicspoint.
2. Report entry and tracking into [OTSORIGAMI](#)
  - a. Once entered into the database, a tracking number is assigned, and a notification is sent to the requestor via email.
  - b. Primary Safety staff notified via email, review for complete information, and route assignments; post updates as progress is made
3. Review of issues – issues reviewed by Safety and other experts as needed.
4. Conclusions and actions to be taken – conclusions of the review guide follow-up actions to be taken.
5. Response to the requestor – Primary Safety staff sends written report to conclusions and actions taken, once determined and completed.

### **6.4 Safety Risk Mitigation 673.25(d)**

Hazards which cannot be eliminated, are mitigated through engineering controls, administrative controls or personal protective equipment. Hazards that pose an imminent danger are expected to be immediately mitigated through the organization's stop work authority.

The Accountable Executive and the CSO have authority to implement operational changes that have safety implications. Accordingly, all hazard identification and analysis proceedings should result in the issuance of a report by the SMS Program Manager to the CSO. The report includes all pertinent data developed by the PTASP/SMS Committee on the identified hazard and risk evaluation process. A recommendation achieved by consensus of the Committee is included, regardless of whether the recommendation is for a change in existing conditions or procedures, or for retention of the existing condition/risk. Any disagreement on the matter, or suggested negative ramifications of the recommendation, must also be included for review and consideration by the Accountable Executive.

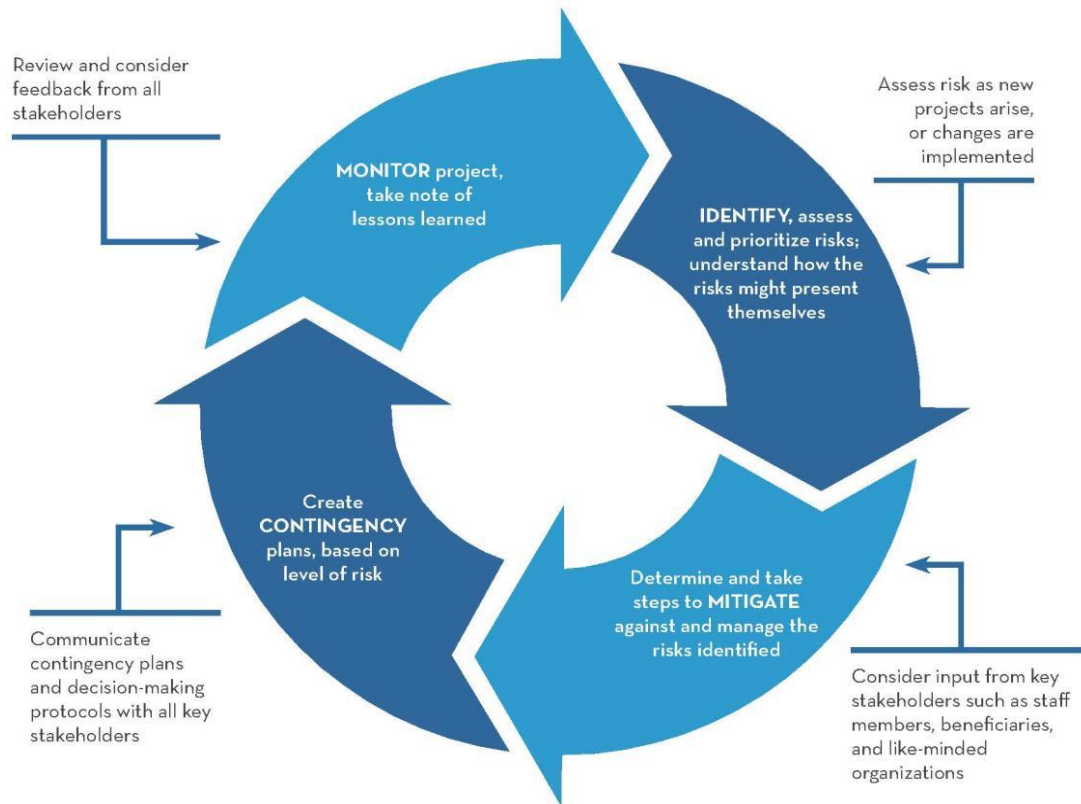
The PTASP/SMS Committee Chair (CSO) discusses reports with the Accountable Executive; if required, the CSO will direct the SMS Program Manager, to prepare a report based on the Accountable Executive's response to the recommendation, including all necessary data pertaining to the decision. If deemed necessary, the appropriate department will be directed to arrange any necessary field testing, pilot program, or controlled environment for developing additional information. Such testing may be requested by the Accountable Executive, CSO or the PTASP/SMS Committee and documented.

Hazards identified within the system are evaluated by appropriate staff and eliminated or mitigated to an acceptable level. The Hazard Analysis Process has been developed to ensure the optimum level of safety is achieved through the expeditious resolution of hazards. In the event the hazard has been categorized as UNACCEPTABLE, the Chief Safety Officer is responsible for maintaining the necessary information, notifications and Corrective Action Plans. Figure 3, Risk Assessment Flow Diagram displays the risk assessment cycle.

Figure 3

## Risk Assessment Flow Diagram

## The risk assessment cycle



Adapted from The Charity Commission

## 6.5 Emergency Preparedness

### *Integration with Public Safety and Emergency Management*

Effective emergency preparedness, response, coordination, and training are essential elements to minimize loss resulting from an emergency or disastrous event. The objective of emergency preparedness and planning is to ensure fast efficient response to emergencies or disasters in a manner that minimizes risk to the safety and health of passengers, employees, and emergency response personnel, the community, and property.

### *Responsibilities for Emergency Preparedness*

Responsibility of Emergency Preparedness Planning, Coordination, and Training resides with OCTA management; however the Security and Emergency Preparedness Department is

responsible for providing a safe and secure environment with an "All Hazards" approach based on preparedness, protection, response, and recovery.

The primary OCTA EOC is located at the OCTA Administration Building, 600 South Main Street, Orange, CA 92868. OCTA's alternate EOC is located at the Garden Grove Annex.

The purpose of the EOC is to provide a facility from which the organization's response to an emergency can be coordinated effectively and to bring together all relevant information about the emergency in one place; organize that information into a useful format; and facilitate the coordination of resources needed to mitigate the effects of the emergency. The EOC will provide a single focal point for centralized activities, which include:

- Management of information;
- Decision making;
- Resource support; and
- Resource application.

Transit Operations and local managers, supported by the Security and Emergency Preparedness Department, are responsible for training employees on facility emergency management, emergency resources (e.g., telephone numbers, local vendors, location and inventory of emergency supplies, etc.), and response protocols of local agencies.

OCTA's Security and Emergency Preparedness Department develops, implements, and administers agency-wide security and emergency management programs and procedures for all the Agency's multi-modal operations and activities in accordance with federal, state, and local regulations, industry standards and the Agency's policies, including but not limited to:

- Emergency Operation Plan;
- System Security and Emergency Preparedness Plan (SSEPP)\*; and
- Continuity of Operations Plan\*.

***\*SSI information is available upon request and appropriate processing.***

The Security and Emergency Preparedness Department also improves emergency preparedness by evaluating responses to actual events. After action reviews are conducted for every emergency response. For major events where there are multiple injuries, property damage, or service disruption, formal review meetings are conducted and documented.

### *Emergency Exercises*

The Security and Emergency Preparedness Department is responsible for organizing and oversight of the annual emergency preparedness drill. The exercise planning is a continuous process with preliminary plans for subsequent activities established as each exercise is planned and conducted. Recommendations and primary safety goals and objectives that OCTA wants to convey to the emergency response agencies are presented to the Security and Emergency Preparedness Department which determines the drill scenario and location each year.

The execution of these activities will function as part of OCTA's Safety Review Process and will serve to evaluate the emergency response capabilities and procedures of all involved parties. Scenarios are acted out to demonstrate, inform, and train OCTA personnel and emergency responders of their individual roles and responsibilities. Findings generated through these activities are documented, and corrective actions generated because of exercises, will be developed and tracked through Corrective Action Plan (CAP) completion.



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**7. SAFETY ASSURANCE (673.27)**

The Safety Assurance component describes how OCTA implements mitigations that are prudent and effective in addressing potential risk of identified hazards. Organizationally, safety related data is collected, analyzed by the SMS Program Manager, and transmitted to the SMS/PTASP Committee for the purpose of review, trending, and use by the Agency to support the review of safety objectives and goals.

**7.1 Safety Performance Monitoring and Measurement 673.27 (b)(1)**

Each OCTA department generates its own performance data used for detection of trends or problems prior to the development of major safety concerns. It is the task of OCTA's SMS Program Manager to monitor and measure the safety performance of the agency's operations through data provided from all OCTA departments and to report to the Chief Safety Officer and the PTASP SMS Committee quarterly.

~~OCTA's Occurrence Tracking System (OTSORIGAMI)~~ is an electronic tool used to track and monitor safety data and objective performance. The ~~OTSORIGAMI~~ is a database that tracks an occurrence or condition, identifies the responsible party, and tracks an item's corrective/preventive actions to closure.

Selected data is accumulated and analyzed for ongoing trending and performance measurement, including fatalities, injuries to passengers and/or OCTA personnel, system reliability, and other safety related events. The SMS Program Manager reports the results of such data quarterly at the SMS/PTASP Committee meeting.

**7.2 Hazard Mitigation Monitoring Process 673.27 (b)(2)**

Monitoring and measurement establishes a baseline for a system; comparing the difference between the criteria and condition at a specific point in time. Once a baseline or goal is established through monitoring and measurement, data can be used as criteria in evaluating operations to reduce risk and hazard and overall safety objective/goal achievement. Ongoing monitoring is built into OCTA's operations, performed continually, and responsive to change. Ongoing monitoring includes regular management and supervisory activities, comparisons, reconciliations, and other routine actions.

OCTA's Operations Management and the Safety Department perform base safety inspections, record the walk, and document any observations.

OCTA, under the regulatory requirements established by the California Occupational Health and Safety Administration (Cal/OSHA), also utilizes an Injury and Illness Prevention Program (IIPP) to establish methods and processes to identify and eliminate unsafe conditions or practices and

control workspace safety hazards. All other local, state, and federal regulations that govern safety compliance outside the jurisdiction of the FTA support the SMS efforts.

#### *Safety Certification*

Safety Certification is the process of verifying that safety requirements are included as early as the planning phase through the life of a project, ensuring the safety of customers, employees, emergency responders, and the public to aid in establishing a proactive approach towards hazard mitigation.

OCTA requires the Safety Certification process to be performed for major projects, rehabilitating or modifying existing systems, or to replace vehicles and equipment. Once the need for Safety Certification is identified, the process becomes part of the project, beginning with the preparation of the project specification and the design contracts. Safety objectives are considered during all activities of a project. Safety objectives include but are not limited to:

- Establish a formalized process that is sufficiently documented to verify compliance with safety requirements;
- Ensure safety is an integral part of the design, procurement, construction, testing, and operations;
- Ensure safety decisions are made by appropriate Project Managers, committees, and responsible contractors;
- Ensure any safety hazards and vulnerabilities that become apparent during reviews, audits, inspections, or system testing are resolved, either by redesign, use of safety/warning devices, or by implementation and enforcement of special procedures; and
- Ensure affected outside response agencies, including fire and police departments, are prepared to respond.

### **7.3 Accident Notification, Investigation, and Reporting 673.27 (b)(3)**

Effective accident/incident investigation and reporting is key to identifying and eliminating hazards to prevent reoccurrence. To minimize and control the threat to life, health, and property, it is essential all appropriate parties be notified of an accident/incident as quickly as possible to ensure a timely response to the scene. Accident/incident reporting and investigation shall be conducted to ensure all accidents/incidents are investigated objectively with the goal of determining causal factors and contributing causal factors.

OCTA's Incident and Injury Investigation policy provides investigation criteria and guidelines for incidents that result in property damage, occupational injuries, environmental damage, or similar unforeseen harmful events. OCTA has an accident notification system (NOTO), Everbridge, which sends an email notification to key organizational personnel, including the Safety Department, regarding an incident or passenger/employee injury. When Central Communications gets a call notifying them of an incident or injury; Central Communications logs the call, generates an occurrence in ORIGAMI OTS vs11, and develops and distributes a NOTO. If necessary, in the event of an incident or injury, Emergency Response agencies will be dispatched immediately.

In the event of an accident/incident, a Field Supervisor has the responsibility to respond to the occurrence. The Field Supervisor will then report to his/her supervisor, who is responsible for notifying and updating the base management and Central Communications during the response efforts. The report from the accident/incident or investigation is submitted to Base Management for review through the OTSORIGAMI. The reporting structure/responsibilities for accidents/incidence is outlined in OCTA's Employee Safety Responsibilities Matrix.

If during an onsite investigation/inspection, a concern arises that constitutes an immediate threat to safety, OCTA staff and management will halt the operation through "stop work authority" and respond immediately to reduce the safety hazard to an appropriate level using the safety risk mitigation processes. Any issues or findings are provided to the CSO and SMS Program Manager in writing for tracking safety performance and for inclusion in the quarterly SMS/PTASP Committee meeting report.

#### *Corrective Action Resulting from Accident Investigation*

Corrective Action Plans for accidents and incidents will follow the same procedures delineated in the Safety Risk Management section.

### **7.4 Drug and Alcohol Policy**

OCTA has implemented the Federal Transit Administration Regulations as set forth in 49 CFR Part 655 and require testing for prohibited substances in the case of transit accidents. OCTA's process for conducting such testing is delineated in the OCTA Drug and Alcohol Policy Manual.

### **7.5 Internal Safety Reporting Program Monitoring 673.27 (b)(4)**

OCTA currently records and reports safety data from operations and facilities to the CSO and SMS Program Manager; the data is recorded and reported to the SMS/PTASP Committee. The SMS Program Manager monitors the safety data for performance measurement and trending. Further, in accordance with the FTA NTD Safety and Security Policy Manual, the OCTA data is recorded and reported in accordance with federal regulations.

### *Internal Safety Audits*

OCTA's current internal audit process is a proactive approach that verifies safety programs have been developed, implemented, and are effective. The internal audit process assesses the effectiveness of safety programs; identifies process deficiencies; identifies potential hazards in the operational system; identifies weaknesses in system safety programs; verifies prior corrective actions are being tracked for closure and evaluates their effectiveness; recommends system safety improvements; provides management with an assessment of the system safety program; and assures continuing evaluation of safety-related programs, issues, awareness, and reporting. OCTA's SMS practices and processes may be evaluated in whole or in part, during regularly scheduled internal audits and according to OCTA's Board approved audit plan.

OCTA will conduct its own independent audit of the PTASP and SMS practices according to the SSOA schedule and requirements, using adequately trained SMS staff, consultants, or contractors. OCTA will also participate in the FTA triennial reviews, providing trained and knowledgeable staff and/or consultants in SMS, OCTA's operational processes, and appropriate documentation of such processes, as requested by reviewers.

### **7.6 ~~Management of Change~~Change Control 673.27 (c)**

Stimuli for system changes and modifications originate both internally and externally and those changes may introduce new hazards and safety risks into transit operations. In either case, appropriate staff are assigned responsibility for managing and implementing the change and evaluating the change through the Safety Risk Management Process. This process demands coordination and cooperation within and between OCTA divisions, departments, and relevant outside agencies and organizations.

OCTA is establishing a process where all proposed changes will flow through the Change Control Committee and this process will be in accordance with OCTA's ~~Configuration Management~~Change Control Policy.

The ~~Configuration Management~~Change Control Policy sets up a Change Control Committee that meets monthly, or as needed, to evaluate proposed and/or potential changes affecting OCTA systems; these changes include those affecting system reliability, system maintainability, system upgrades, system expansions, ability to share information with other systems, and the ability to integrate with other systems. The ~~Configuration Management~~Change Control Committee discusses project status, planned future projects, new business and assignments, safety impacts, potential hazards, and other relevant topics. The ~~Configuration Management~~Change Control process accommodates changes and ensures documents, records, and data remain concise and valid.

It is important that safety requirements are included as early as the planning phase through the life of a project, ensuring the safety of customers, employees, emergency responders, and the public is considered. Safety objectives are incorporated into all projects in accordance with the ~~Configuration Management~~Change Control Policy.

## **7.7 Continuous Improvement 673.27(d)**

Evaluation of the SMS is necessary to ensure it effectively and efficiently allows OCTA to meet safety objectives and performance targets. OCTA uses the data and information collected from the subcomponents in this Safety Assurance section while conducting safety performance monitoring to address any identified deficits in SMS organizational structures, processes, and resources in a timely manner. OCTA strives for continuous improvement and recognizes this is a dynamic process and significant efforts within Safety Assurance and Safety Promotion are required to improve systems and practices to comply with SMS standards.

### *Data Analysis and Tracking*

Safety-related data is collected, compiled, organized, stored, and maintained by individual departments, the data is then reported to, and analyzed by, the SMS Program Manager. Further, the information gathered during this process is reported to the PSMS/PTASP Committee by the SMS Program Manager and used by OCTA to identify hazards through trend analysis. If a trend is identified through the analysis, the trend is further investigated to determine the causes and tracked through resolution by the responsible department and the SMS Program Manager. Moreover, tracking of hazard-related data is used to identify trends; trends are further analyzed and/or investigated to determine causal factors. Identified hazards are categorized with corrective action recommendations. Corrective actions are tracked within the responsible department to closure using a hazard tracking log and reported to the SMS Program Manager.

### *Procurement Risk Mitigation*

OCTA's Procurement Policy describes procedures to guide staff members, potential vendors, contractors, and suppliers with respect to procurement activities taken on behalf of OCTA, recognizing safety and asset protection as core business values.

Equipment, materials, and professional services for use by OCTA are procured based on safety and industry specifications provided by the user department. OCTA policies and procedures require management authorize all purchases. Requisitions are reviewed by the associated management of the requesting department for safety specifications and efficient and effective usefulness. Larger purchases require a contract developed under supervision of an associate management and are subject to approval by the Board. This assures all essential specification requirements, applicable standards and restrictions are included in the contract terms. Purchasing personnel are not authorized to modify the specifications or grant exceptions.

In its effort to ensure the procurement process considers and evaluates the safety aspects of services, equipment, and other materials obtained, OCTA includes safety specification requirements in all technical specifications and contracts. The Procurement Department requires all safety related purchase requests be reviewed and approved by the Project/Procurement Manager in consultation with the Safety Department.

### *Transit Asset Management (TAM)*

TAM is a business model used to guide the prioritization of funding based on the condition of assets. TAM defines State of Good Repair as the condition of an asset to operate at full performance level: able to perform its designated function, does not pose an unacceptable safety risk, and its lifecycle investments have not been met or recovered. OCTA has adopted TAM as the official, institutional approach in managing infrastructure assets, making capital investment and operational expenditure decisions, and considers the results of its condition assessments while performing safety risk management and safety assurance activities. TAM data is provided to the SMS Program Manager for inclusion in the monthly SMS/PTASP Committee meeting agenda.

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**8. SAFETY PROMOTION (673.29)**

Safety Promotion fosters a positive safety culture and improves safety performance by increasing safety awareness through training and communication. Appropriate training for all employees regardless of their position within OCTA, provides knowledge for a successful SMS. Through communication of lessons learned and safety performance data, employees are made aware of safety priorities and concerns as they relate to their individual job tasks and the entire OCTA organization. Developing a safety culture requires regular training and ongoing promotion. The activities below must be continually implemented, reviewed, and updated.

**8.1 Safety Training Program 673.29 (a)**

With the implementation of the PTASP and SMS, OCTA has adopted a training program to ensure all employees are aware of the PTASP and SMS responsibilities. New employees will be trained while attending new employee orientation/onboarding and current employees will undergo SMS/PTASP familiarization training. All employees will sign-off verifying they have been trained in the SMS process and understand their role and responsibility.

Employees at all levels of the Agency need to understand 1) what SMS is, 2) how it supports OCTA's mission, and 3) what their specific individual SMS responsibilities are. OCTA has developed criteria to identify and provide skills training related to safe job performance to include initial and refresher training for all relevant job functions. Training includes measures for ensuring employees are competent to perform their safety-related duties.

OCTA has robust safety training programs including, but not limited to, the following:

- Student Coach Operator Training (SCOT)
- Operations new hire training
- Annual Required Training (ART)
- CAL/OSHA required training
- OCTA CORE 11 Safety Training
- Retraining based on performance deficits
- Maintenance new hire and ongoing training
- Maintenance tailgate meetings
- Safety Spotlights

Employees receive training related to the employee safety-reporting program during initial orientation training and are encouraged to use the identified mechanisms to report safety hazards, near misses, concerns, and issues. Bus operator and vehicle maintenance employee training programs provide opportunities for delivering SMS related training. OCTA's six-week formal new-hire bus operator training program curriculum includes classroom and behind-the-wheel training. Operator and mechanic training includes an eight-hour ART program to meet the requirements of a commercial driver's license. Maintenance employees receive extensive training

at hire and aggressive ongoing skills development training and refresher training on safety-related topics.

All SMS/PTASP safety-related classroom and on the-job-training is appropriately documented within individual employee safety training records and can be accessed through the Learning Management System (LMS) and Records Management. Training documentation for operators and mechanics is kept within the individual departments and mandatory administrative training is documented through Halogen LMS software. All training records can be accessed upon request.

OCTA evaluates the effectiveness of its safety-related training through departmental inspections, compliance assessments, and audits. All formal training processes shall be reviewed and audited periodically, when an accident investigation lists training as contributory, when training becomes suspect during any hazard analysis process, or when summary student test scores indicate low instructional effectiveness. All training classes, training manuals, and lesson plans are subject to review and audit.

Safety-related training curriculum for all employees is updated to reflect new techniques, technologies, and results of investigations, corrective actions, and regulatory changes. OCTA provides training to employees on new equipment, technologies, and regulatory changes as necessary.

#### *Emergency Response Planning, Coordination, and Training*

The Security and Emergency Preparedness Department is responsible for providing a safe and secure environment with an “All-Hazards” approach based on preparedness, protection, response, and recovery. The Department ensures OCTA is compliant with required employee training in the National Incident Management System and the 9/11 Commission Act.

Operations managers are responsible for training employees on evacuation procedures, facility emergency management organization, emergency resources, response protocols of local response agencies, and the SMS.

#### *Contractor Safety*

Contractors are required to comply with all applicable State and Federal Regulations and those established by OCTA. Each contractor is responsible for and shall comply with all safety, fire, security policies, procedures, and safe work practices, as well as any other appropriate safety procedures specified in the contract. OCTA reserves the right to audit training activities at its discretion.

### **8.2 Safety Communication 673.29 (b)**

OCTA has developed quantifiable goals to ensure performance can be tracked, evaluated, and measured for continued improvement and success. OCTA has established effective safety communication activities to ensure all employees and contractors are aware of the following goals and responsibilities:



- Continue growth and development of all OCTA SOPs, Policies, and Plans on an annual basis to ensure they reflect the current operating environment;
- Continue to grow SMS, allowing OCTA to systematically identify safety hazards, mitigate risk and reduce fatalities and injuries resulting from transit operations;
- Reduce the injury incidence rate by minimizing exposure to unsafe conditions and reducing hazardous employee behavior;
- Provide a safe and efficient transit operation by ensuring that all vehicles, equipment and facilities are regularly inspected, maintained and serviced as needed; and
- Achieve 100 percent of scheduled routine inspections, preventive and regular maintenance work is completed on time, and essential repairs addressed in a designated time.

Further, OCTA ensures employees and contractors are mindful of SMS responsibilities, processes, activities, and tools relevant to their responsibilities through the following communication platforms:

- Employee Safety Reporting;
- Safety meetings;
- Union meetings;
- Coach operator quarterly meetings with supervisors and managers;
- OCTA Intranet; newsletters, safety bulletins, audio-visual monitors in break rooms;
- Signage;
- Operator log-in messages;
- Text message alerts;
- Radio supervisor communication with operators;
- One-on-one communication between supervisors and frontline employees;
- Daily Maintenance Tailgate meetings;
- Meetings with contractors;
- Committee meetings;
- Safety emails and notifications;
- Safety captains;
- Base television displays and bulletin boards;
- Safety campaigns;
- Intranet postings.

As part of the SMS program, the SMS Program Manager collects data to provide performance reports and trend analysis to the SMS/PTASP Committee, to include: the types of safety actions taken, why safety procedures have been introduced or changed, and information related to significant accident and incident investigation outcomes. OCTA communicates employees' responsibilities in OCTA Staff Safety Roles and SMS Responsibilities Matrix, Appendix B.

### **8.3 SMS Documentation and Records 673.11 (c), 673.31**

OCTA must at a minimum, maintain documents that set forth its PTASP, including those related to the implementation of its SMS, and results from SMS processes and activities. As part of

673.31 (d), OCTA will maintains all documentation regarding SMS and PTASP, including results. The documentation will be available upon request by the FTA or other federal entity having jurisdiction and to auditors. OCTA's SMS documentation will be maintained for three years, in accordance with FTA requirements and OCTA's Records Management.

OCTA has set up a SharePoint site application for all PTASP/SMS recordkeeping. The SharePoint site application allows for ease of document review, sharing, control, and archiving PTASP/SMS documents between authorized/applicable personnel. Documents on the SharePoint site may include but are not limited to: Draft and Final PTASP, meeting agendas, meeting minutes, audit reports, Emergency Management Plan, PTASP related correspondence, data reports, hazard analyses, corrective action logs, training, etc.

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**APPENDIX A  
IMPLEMENTATION ACTIONS**

**2020 IMPLEMENTATION ACTIONS**

<b>PTASP/FTA Code</b>	<b>Action Item</b>	<b>Timeline</b>	<b>Responsible Person / Group</b>
673.23	Establish and implement PTASP/SMS Committee	Q1	HSEC/Planning
673.23	Establish safety performance targets and objectives	Q1	PTASP/SMS Committee
673.23	Engage the Contracted Services Management in PTASP expectations/requirements	Q1	HSEC / Operations
673.31	Establish a Documentation Control/Management System (Records Management)	Q1	Information Systems / HSEC
673.23	Implement PTASP through the Board of Directors	Q2 (May)	CEO/Planning/HSEC/Operations
5323	Submit Certification of Assurance to the FTA	Q2 (July)	Finance and Administration / Government Affairs / HSEC
673.23	Safety Management Policy Communication – existing and new employees	Q2	HSEC / HR / Operations
673.29	Establish SMS communication tools and strategy	Q3	HSEC / External and Internal Communications
	Expand on existing hazard reporting systems to include anonymous reporting	Q3	IS / HSEC / Operations
<del>673.25</del>	<del>Identify and implement a Risk Assessment process (All new hazards)</del>	<del>Q4</del>	<del>PTASP/SMS Committee / Operations / HSEC</del>
<del>673.27</del>	<del>Establish a hazard/risk mitigation monitoring process</del>	<del>Q4</del>	<del>PTASP/SMS Committee / Operations / HSEC</del>
<del>673.27</del>	<del>Establish a single data depository for safety and SMS data — Create dashboard for summary and real-time analysis — Safety performance monitoring and measuring</del>	<del>Q4</del>	<del>Information Systems / HSEC / Operations</del>
673.29	Identify and establish SMS training requirements for OCTA staff and contractors	Q4	HSEC / Learning & Development / Operations
673.27	Conduct a safety culture survey to assess existing status	Q4	HSEC / HR

**2021-2023 IMPLEMENTATION ACTIONS**

PTASP/FTA Code	Action Item	Timeline	Responsible Person / Group
673.27	Annual PTASP review and updates	Q2 2021 (June)	CEO / Chief Safety Officer / SMS/PTASP Committee
<u>673.27</u>	<u>Establish a hazard/risk mitigation monitoring process</u>	<u>Q4 2021 (December)</u>	<u>PTASP/SMS Committee / Operations / HSEC</u>
<u>673.27</u>	<u>Establish a single data depository for safety and SMS data</u> - <u>Create dashboard for summary and real time analysis</u> <u>Safety performance monitoring and measuring</u>	<u>Q4 2021</u>	<u>Information Systems / HSEC / Operations</u>
673.23	Incorporate OC Streetcar into the PTASP and submit draft to the CPUC for review/approval	Q2 202 <del>2</del> <sup>1</sup> (April)	HSEC / Operations
673.23	Submit updated PTASP through the Board of Directors to OC Streetcar detail	Q2 202 <del>2</del> <sup>1</sup> (July)	CEO / HSEC / Operations
673.27	Independent PTASP/SMS audit utilizing contractor, consultant, or other organization	Q2 2022 (June)	HSEC / Internal Audit
673.25	Complete a formal risk analysis for existing operational hazards	Q4 2022	HSEC / Operations
673.27	FTA Triennial Review to include PTASP/SMS	Q4 2022	Government Relations / HSEC / Operations

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**APPENDIX B  
HAZARD MANAGEMENT PROCESS-IDENTIFICATION/ANALYSIS**

OCTA facilities require System Safety be effective in helping identify and minimize hazards, in a mature operational environment. Hazardous conditions are identified, investigated and resolved to an acceptable level. The PTASP, this Hazard Identification/Analysis Process document, and the associated system safety tasks, provide for a method of identifying, analyzing, assessing, and resolving conditions or circumstances that are deemed to present a threat to the safe operation of OCTA transit system.

This Hazard Analysis document incorporates proven methods of tests and inspections employed by each OCTA division and department, enabling the examination of all aspects of operation and review of their interdisciplinary ramifications. This provides management with hazard and risk visibility and the causes and effects of potential accidents. In addition, continual monitoring verifies the total system, including but not limited to patrons, the public, employees, contractors, equipment, the environment; OCTA maintains an acceptable level of safety, and that potential hazards do not exist in operational areas previously determined to be safe.

Hazard identification and resolution is a core element of the PTASP and this Hazard Identification/Analysis document, emphasizing timely correction of unsafe conditions, anticipated and reconciled before serious accident, injury, or damage occurs. To ensure it provides as safe and reliable transportation services as possible, OCTA has established a process by which hazards are identified, analyzed for potential impact on the operating system, and resolved in a manner acceptable to OCTA's management and applicable regulatory agencies.

OCTA management, staff, contractors, and suppliers are required to implement high standards of safety and system assurance throughout the design, construction, testing, and operational phases of OCTA's projects. Hazards, which cannot be eliminated in the design, are to be controlled by safety devices, warning devices, training, and/or written procedures to prevent mishaps. Most hazards are identified in the field, reported, and entered in reports. These hazards are addressed by the responsible departments through routine corrective measures and do not require special attention.

**Hazard Identification**

Hazard identification is accomplished as Department Managers collect and analyze data to monitor trends. Unless additional resources are requested, the Department Manager investigates and resolves all hazards within their department. OCTA Department Managers review reports daily from the previous days' operation. Immediate corrective action is initiated when appropriate; otherwise, data is evaluated and used to set the agenda for the next PTASP/SMS Committee meeting. The SMS Program Manager prepares a trend analysis report for PTASP/SMS meeting. Trend analysis reports are reviewed at PTASP/SMS Committee meetings. Additionally, each Department Manager reviews departmental reports and shift change briefings for the previous operational period and makes a similar evaluation for their department.

OCTA documents hazards that develop through multiple sources, such as: accidents, incidents, and leading indicators. OCTA also evaluates hazards to determine if multiple events occurred leading up to an event. This ensures each possible cause is evaluated and documented for trending purposes. To address hazards resulting from system extensions or modifications, operational and other changes, safety analyses included in design and procurement contracts will provide for:

- Identification of potential hazards;
- Assessment of the severity and probability of occurrence of each potential hazard;
- Timely awareness of hazards for those who must resolve them; and
- Tractability and control of hazards through all phases of a project's life cycle.

### *Hazard Investigation and Reporting*

Hazards which are not resolved at the operating, maintenance, or other front-line department level are appropriately investigated by the CSO, assisted by the responsible Operations Department. Investigation findings are documented and reported to the CSO for resolution.

### **Safety Risk Assessment**

Hazard severity categories are defined to provide a qualitative measure of the worst credible mishap resulting from personnel error; environmental conditions; design inadequacies; and procedural deficiencies for a system, subsystem, or component failure or malfunction. The probability a hazard will occur during the planned life expectancy of the system element, subsystem, or component can be described subjectively in potential occurrences per unit of time, event, population, items, or activity. A qualitative hazard probability may be derived from research, analysis, and evaluation of historical safety data from the same or similar systems. Supporting rationale for assigning a hazard probability are documented in hazard analysis reports.

The objective of hazard identification and analysis is to identify and define as many hazardous conditions as possible and enter them into the Hazard Resolution process before those conditions or associated actions cause or contribute to an accident. Although it is virtually impossible to identify every hazard, there are two basic time-tested methods for orderly identification of hazards: inductive and deductive. The inductive hazard identification method consists of an analysis of system components to identify their respective failure modes and the effects they will have on the total system. This method assumes the failure of single elements or events and, through analysis, determines the potential consequential effects on the system or subsystem. The techniques commonly used for inductive hazard identification include:

**Preliminary Hazard Analysis (PHA)** – is a semi-quantitative analysis performed to identify potential hazards and accidental events that may lead to an accident, rank the identified accidental events according to their severity, and identify required hazard controls and follow-up actions.

**Sub-System Hazard Analysis (SSHA)** – is a safety analysis tool for identifying hazards, their associating causal factors, effects, level of risk, and mitigation design measures.

**Operating Hazard Analysis (OHA)** - is performed to determine all applicable operational safety requirements for personnel, procedures, and equipment throughout all phases of the system life cycle. Engineering data, procedures, and instructions developed from other safety analyses, the engineering design, and initial test programs are all used to support this analysis. Operating hazards are generally resolved in preparation for operations by way of training, developing operating procedures, and developing emergency operating procedures.

These types of hazard analyses may also be utilized by OCTA during major capital projects, system modifications, system changes that require Safety / Security Certification, or as determined by the CSO.

The deductive hazard identification method involves defining an undesired effect or event and then deducing the possible conditions or system component faults (or combinations thereof) which are necessary to cause the undesired effect or event.

### **Hazard Analysis Methodology**

The hazard analysis methodology has two steps: evaluating hazard severity (categorizing the hazard) and evaluating hazard probability.

#### ***Hazard Severity***

OCTA assigns a hazard severity rating based on the definitions in MIL-STD-882E. It is a subjective determination of the worst case that could be anticipated to result from design inadequacies, human error, component failure or malfunction. The ratings are:

**Category 41, Catastrophic** - Operating conditions are such that design deficiencies, human error, element, sub system or component failure or procedural deficiencies may cause death or major system loss and require immediate termination of the unsafe activity or operation.

**Category 32, Critical** - Operating conditions are such that design deficiencies, human error, element, sub system or component failure or procedural deficiencies may cause severe injury, severe occupational illness or major system damage and require immediate corrective action.

**Category 23, Marginal** - Operating conditions are such that they may result in minor injury, occupational illness or system damage and are such that human error, subsystem or component failures can be counteracted or controlled.

**Category 14, Negligible** - Operating conditions are such that human error, subsystem or component failure or procedural deficiencies will result in less than minor injury, occupational illness or system damage.

Hazard severity categories are defined to provide a qualitative measure of the worst credible mishap resulting from personnel error, environmental conditions, design inadequacies, and procedural deficiencies for a system, subsystem or component failure or malfunction. It reflects the principle that not all hazards pose an equal amount of risk to personnel safety.

### *Hazard Severity Index*

HAZARD SEVERITY		
Category	Severity	Characteristics
<del>41</del>	Catastrophic	Death or system loss
<del>32</del>	Critical	Severe injury, severe occupational illness or major system damage
<del>23</del>	Marginal	Minor injury, minor occupational illness or minor system damage
<del>14</del>	Negligible	Less than minor injury, occupational illness or system damage

### *Hazard Probability*

The probability that a hazard will occur during the planned life expectancy of the system element, subsystem, or component can be described subjectively in potential occurrences per unit time, event, population, items or activity. A qualitative hazard probability may be derived from research, analysis and evaluation of historical safety data from the same or similar system. OCTA assigns a probability rating to a particular event or a specific hazard occurring during the planned life expectancy of the operating system. Supporting rationale for assigning a hazard probability is documented in hazard analysis reports.

### *Hazard Probability Index*

HAZARD PROBABILITY			
Description	Level	Specific Individual Event	Fleet/ Inventory
Frequent	<del>6A</del>	Likely to occur frequently	Continuously experienced
Probable	<del>4B</del>	Will occur several times in the system's lifecycle	Will occur frequently
Occasional	<del>5C</del>	Likely to occur sometime in the system's lifecycle	Will occur several times
Remote	<del>3D</del>	Unlikely, but possible to occur in the system's lifecycle	Unlikely, but can be expected to occur
Improbable	<del>2E</del>	So unlikely it can be assumed occurrence may not be experienced	Unlikely to occur but possible
Eliminated	<del>1F</del>	Eliminated	



### ***Hazard Categorization (Identified by Hazard Risk Index)***

Through the established process, OCTA will assess the level of risk for each identified hazard to determine what action(s) must be taken to correct or document the hazard risk. This risk assessment system is incorporated into the formal analysis which enables the CSO and CEO, if concurrence is necessary, to understand the amount of risk involved in accepting the hazard in relation to the cost (schedule, dollars, operations, etc.) to reduce the hazard to an acceptable level.

The Hazard Risk assesses the risk based upon hazard category and probability and the criteria for defining further actions based upon the index.

OCTA applies its collective, deductive reasoning and/or may utilize a method represented by MIL-STD-882E. The information is compiled, and any necessary statistics or trend information is entered into the permanent file.

### ***Hazard Risk Index***

<u>Probability</u>	<u>HAZARD RISK INDEX</u>				
	<u>Frequency of Occurrence</u>	<u>Negligible</u>	<u>Marginal</u>	<u>Critical</u>	<u>Catastrophic</u>
	<u>6</u>	<u>6</u>	<u>12</u>	<u>18</u>	<u>24</u>
	<u>5</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>
	<u>4</u>	<u>4</u>	<u>8</u>	<u>12</u>	<u>16</u>
	<u>3</u>	<u>3</u>	<u>6</u>	<u>9</u>	<u>12</u>
	<u>2</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
	<u>1</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
<u>Severity</u>					

HAZARD-RISK INDEX				
	1	2	3	4
Frequency of Occurrence	Catastrophic	Critical	Marginal	Negligible
(A) Frequent	1A	2A	3A	4A
(B) Probable	1B	2B	3B	4B
(C) Occasional	1C	2C	3C	4C
(D) Remote	1D	2D	3D	4D
(E) Improbable	1E	2E	3E	4E
(F) Eliminated	Eliminated			

When the Hazard Severity Index is combined with the Hazard Probability Index, the result is the Hazard Risk Index. Each Hazard Risk Index requires a specific level of action. Actions will be taken to eliminate identified hazards or reduce the associated risk. A hazard with a risk index of "Unacceptable" is not permitted and must be redesigned or modified to eliminate or minimize and control the hazard to a more acceptable level.

### *Hazard Acceptance Criteria*

HAZARD ACCEPTANCE CRITERIA			
Hazard Risk Index		Decision Authority	Special Conditions
	<del>1A, 1B, 1C, 2A, 3B1D, 24</del>	Unacceptable	Requires review by CSO and Executive Director
	<del>1D, 2C, 3A, 3B4-9</del>	Undesirable	Requires review by CSO and Executive Director
	<del>1E, 2D, 2E, 3C, 3D, 3E, 4A, 4B2-3</del>	Acceptable with Review	Requires review by CSO
	<del>4C, 4D, 4E1</del>	Acceptable	Determination made by Manager, No Review Required
	<del>1F, 2F, 3F, 4F</del>	Eliminated	Eliminated

### **Hazard Control and Elimination**

Before implementation of any corrective action, system safety analyses establish a hazard severity category (~~1 through 4~~) and a probability ranking (~~A through E~~ 1 through 6) which are combined to form a Risk Index, reflecting both severity and probability of occurrence for each identified hazard. The range of possible Risk Indices is shown in the above Sample Hazard Evaluation, Analysis, and Resolution Matrix.

### ***Hazard Risk Indices***

Risk assessment criteria will be applied to the identified hazards based on their estimated severity and probability of occurrence to determine acceptance of the risk or the need for corrective action to further reduce the risk.

Action will be taken to eliminate identified hazards or reduce the associated risk. Catastrophic and critical hazards will be eliminated, or their associated risk reduced to an acceptable level. If this is impossible or impractical, alternatives will be recommended for the appropriate decision-making Hazard Resolution and Control.

OCTA shall use the Hazard Resolution and Control process as described below. The process involves the analysis and corrective action taken to reduce the risk associated with an identified hazard to the lowest practical level. The order of precedence resolving identified hazards is as follows:

- **Design for Minimum Risk.** Design new facilities and equipment to eliminate hazards. If an identified hazard cannot be eliminated, its associated risks must be reduced to an acceptable level (see Risk Assessment Criteria) through the design selection.

- **Utilization of Safety Devices.** If an identified hazard cannot be eliminated, or its associated risk cannot be reduced through design selection, that risk must be reduced to an acceptable level using protective safety features or devices. Provision is made, and procedure is issued for periodic inspection and functional checks of safety devices.
- **Warning Devices.** When neither design nor safety devices can effectively eliminate identified hazards or reduce risk to an acceptable level, warning devices are used to detect the condition and produce an adequate warning signal to alert individuals to the hazard. Warning devices are standardized to minimize the probability of incorrect reaction of personnel to these warning signals.
- **Develop Special Procedures and Training.** When it is impossible or impractical to eliminate hazards through design selection or adequately reduce its associated risks through safety or warning devices, then approved procedures and special training programs are used. Procedures may include the use of personal protective equipment. Precautionary notations and warning signs are standardized. OCTA employees who perform critical tasks require certification of personal proficiency.

Warning, caution, and other forms of written advisories cannot be used as the only method of risk reduction for ~~Category 1~~UN (Catastrophic) and UD/WR~~Category 2~~ (Critical) hazards.

Facility and system contract documents require that contractors/suppliers solve hazards in accordance with this list, in order of precedence. Specifications include the requirement for contractors/suppliers who provide system, subsystem or equipment during construction to establish and maintain a safety program. These programs, at a minimum, define objectives, tasks, procedures, schedules, and data submittal for the safety activities that are performed by the contractor/supplier. The safety program and supporting documentation are subject to review and approval by OCTA.

Hazards identified within the system are evaluated by the Safety Committee, appropriate staff and eliminated and controlled to a level acceptable to OCTA. As part of the hazard resolution process, reports summarizing status of safety issues and concerns are prepared and distributed to OCTA's management and other project participants for review and comment.

The Accountable Executive or CSO has authority to implement any change that has system safety implications. Accordingly, all hazard identification and analysis proceedings result in the issuance of a report by Safety to the Accountable Executive. The report is prepared by Safety and includes all pertinent data developed on the identified hazard. A recommendation achieved by consensus must be included, regardless of whether this recommendation is for a change in existing conditions or procedures, or for retention of the status quo. Any disagreement on the matter, or suggested negative ramifications of the recommendation, must also be included, to present as much information as possible to the Accountable Executive.

Hazards identified within the system are to be evaluated by appropriate staff and eliminated or controlled to an acceptable level. The following schedule has been developed to ensure the optimum level of safety is achieved through the expeditious resolution of hazards. All hazard levels

are reviewed by appropriate staff. In the event the hazard has been categorized as UNACCEPTABLE, the CSO is responsible for maintaining the necessary information, notifications and Corrective Action Plans.

HAZARD RESOLUTION SCHEDULE	
Criterion	Resolution Timetable
Unacceptable	Must be eliminated as soon as possible; there is no other option.
Undesirable	Must be resolved in 30 working days
Acceptable with review	Must be resolved in 30 working days
Acceptable	Notification within 30 working days
Eliminated	No notification required

### **Hazard Tracking**

OCTA will utilize a hazard tracking log which consists of the following information and is maintained by the CSO:

- Assigned hazard number;
- Date hazard identified;
- Hazard title;
- Hazard description;
- Sources from which it was identified;
- The element of OCTA's operation affected by the hazard;
- Initial hazard classification;
- Current hazard classification; and
- Corrective action plan.

The hazard tracking log is updated monthly or as requested. All captured data is analyzed for the identification of developing trends to ensure future safety risks/hazards can be mitigated and/or eliminated.

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**APPENDIX C**

**PTASP RELATIONSHIP TO OTHER FEDERAL REGULATIONS**

**Public Transportation Safety Program Rule- 49 U.S.C. § 5329**

The Public Transportation Safety Program Rule establishes substantive and procedural rules for FTA’s administration of the Public Transportation Safety Program authorized by 49 U.S.C. § 5329. The rule establishes FTA’s Safety Management Systems (SMS) approach to the development and implementation of the Safety Program. Further, it sets rules of practice for the FTA’s enforcement authority and describes the contents of a National Public Transportation Safety Plan.

*National Public Transportation Safety Plan (NPTSP)- section 5329(b)*

Through the NPTSP, the FTA has adopted the principles and methods of SMS as the basis for enhancing the safety of public transportation in the United States. The NPTSP is a policy document, communications tool, and a repository of standards, guidance, best practices, tolls, technical assistance, and other resources.

OCTA’s PTASP was written in accordance to the Public Transportation Safety Program Rule and the NPTSP was a core document in outlining OCTA’s SMS.

**Public Transportation Agency Safety Plan (PTASP) Rule- 49 CFR Part 673**

The Federal Transit Administration (FTA) published a final rule for PTASP as authorized by the Moving Ahead for Progress in the 21st Century Act (MAP–21). This final rule requires States and certain operators of public transportation systems that receive Federal financial assistance under Urbanized Area Formula Program (49 U.S.C. § 5307) to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS). Transit operators must certify they have a safety plan, meeting the requirements of the rule, in place by July 20, 2020. OCTA is on schedule to meet the July 20, 2020 deadline and, to remain compliant, will review and revise the Plan annually and have it certified by the OCTA Board.

The safety plan requirements for rail transit agencies under FTA’s original State Safety Oversight Rule (49 C.F.R. Part 659) implemented system safety through 21 specific requirements for System Safety Program Plans (SSPPs). The major focus of system safety is to integrate risk management into the overall system engineering process rather than addressing hazards as day-to-day operational considerations. The PTASP replaces the current OCTA BSSPP. Once the “OC Streetcar” is in operation in 2022, OCTA will be fully responsible to the requirements and for having related practices reviewed by the appropriate State Safety Oversight program.

**State Safety Oversight (SSO) Rule- 49 CFR Part 674**

On March 16, 2016, FTA issued a final rule for State Safety Oversight (SSO) to oversee the safety of rail fixed guideway public transportation systems, and entities that own or operate rail fixed

guideway public transportation systems with Federal financial assistance authorized under 49 U.S.C. Chapter 53.

The State Safety Oversight Agency (SSOA) has authority to review, approve, oversee, and enforce the Public Transportation Agency Safety Plan for a rail fixed guideway public transportation system required by 49 U.S.C. 5329(d). The SSOA has investigative and enforcement authority with respect to the safety of all rail fixed guideway public transportation systems within the State.

Once the OC Streetcar initiates revenue operations, at least once every three years, the SSOA will audit OCTA's compliance with the Public Transportation Agency Safety Plan required by 49 U.S.C. 5329(d). At least once a year, the SSOA reports the status of the safety of each rail fixed guideway public transportation system to the Governor, the FTA, and the Board of Directors, or equivalent entity, of the rail fixed guideway public transportation system. The FTA will audit each State's compliance at least triennially, consistent with 49 U.S.C. 5329(e)(9).

### **Transit Asset Management (TAM) Rule- 49 CFR Part 625**

Through the implementation of its TAM Plan, required under 49 C.F.R. Part 625, OCTA can consider the results of its condition assessments while performing safety risk management and safety assurance activities. The PTASP final rule applies to only Section 5307 recipients and sub-recipients, and the TAM rule applies to all operators of public transit. However, the two plans can support one another by providing useful data for agency use and NTD reporting.

The results of TAM condition assessments, and subsequent SMS analysis can help prioritize a transit agency's TAM Plan elements. Condition assessments help identify potential safety issues, which could undergo a safety risk assessment as part of Safety Risk Management (SRM). Further, TAM data and analysis can also be used for performance monitoring and measurement as part of Safety Assurance. Results of safety risk assessments and safety performance monitoring and measurement can guide the prioritization of an asset for repair or replacement. OCTA is responsible for both the TAM Plan and the PTASP and can benefit by coordinating efforts and data.

### **Public Transportation Safety Certification Training Program Rule- 49 CFR Part 672**

The Safety Certification Training Program establishes a curriculum and minimum competencies for Federal, SSOA personnel and contractors who conduct safety audits and examinations of rail fixed guideway public transportation systems, and for designated transit agency personnel and contractors who are directly responsible for safety oversight of a recipient's rail fixed guideway public transportation systems. The final rule for the Safety Certification Training Program replaces an interim program which became effective on May 28, 2015. OCTA should continue to educate individuals whom are directly responsible for SMS or are directly responsible for safety oversight to ensure compliance.

### National Transit Database (NTD) Rule 49 U.S.C 5335(a)

Transit agency's receiving funding from the Urbanized Area Formula Program (5307) or Rural Formula Program (5311) are required to submit data to the NTD in uniform categories. OCTA submits reports to NTD each fiscal year. The PTASP rule and NTD reporting rule are related, as both rules require OCTA to track data based on the same data points; fatalities, injuries and safety events per total revenue vehicle mile by mode, with the additional requirement of mean distance between major mechanical failures.

The following table is a summary of FTA safety regulations, which impact the PTASP, requiring OCTA compliance.

#### FTA SAFETY REGULATIONS

Regulation	Overview
Public Transportation Safety Program Rule CFR Part 670	Establishes the procedural rules for enforcement of FTA's safety programs.
National Public Transportation Safety Plan 49 U.S.C. 5329	Manages the safety risks and safety hazards within public transportation systems.
Public Transportation Agency Safety Plan 49 CFR Part 673	Requires transit agencies to develop and implement safety plans based on SMS principles, performance targets.
State Safety Oversight 49 CFR Part 674	Strengthens state oversight of rail transit systems.
Transit Asset Management 49 CFR 625	TAM Plan establishes state of good repair performance measures and targets NTD reporting.
Public Transportation Safety Certification Training Program 49 CFR Part 672	Establishes training curriculum to ensure basic level of safety-related competency for rail transit system auditing and oversight.
National Transit Database 49 U.S.C. 5335(a)	Reporting system, using uniform categories to accumulate public transportation financial, operating, and asset condition.

Source: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-guidance>



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**PUBLIC TRANSPORTATION AGENCY SAFETY PLAN  
FOR THE  
ORANGE COUNTY TRANSPORTATION AUTHORITY**

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**APPENDIX D**

**REFERENCED AND RELATED DOCUMENTS**

~~Configuration Management~~Change Control Policy  
Continuity of Operations Plan (COOP)  
Drug and Alcohol Policy  
Drug and Alcohol Policy Manual  
Ethicspoint Policy  
Emergency Operation Plan (EOP)  
Hazard Identification/Analysis  
Injury and Illness Prevention Program  
Internal Audit Policy  
NTD Reporting Policy  
Procurement Policy  
Records Management Policy  
System Security and Emergency Preparedness Plan (SSEPP)  
Safety Review Process  
SMS/PTASP Committee Policy  
Transit Asset Management Plan



**PUBLIC TRANSPORTATION AGENCY SAFETY PLAN  
ANNUAL REVIEW**

**JUNE 2021**

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## 1.0 Scope

The Federal Transit Administration published the Public Transportation Agency Safety Plan (PTASP) regulation, 49 CFR Part 673, on July 19, 2019. Within this regulation, it is required that every agency receiving funds under the Urbanized Area Formula Program are required to develop and implement a Public Transportation Agency Safety Plan (PTASP), based on Safety Management Systems (SMS) principles and methods. The Board of Directors adopted the Orange County Transportation Authority's (OCTA) PTASP on May 11, 2020 as required. As part of the regulation, agencies are to conduct an annual review and Board of Directors update through the Safety Management System (SMS) risk-based approach.

## 2.0 Purpose

Due to the implementation of 49 CFR Part 673, OCTA is required to annually submit the current PTASP to the Board of Directors for review and approval, along with an annual safety report. The annual review of the PTASP will be conducted by the Accountable Executive, the Chief Safety Officer, and the SMS Program Manager each fiscal year, no later than June 30. OCTA has completed its first year of program implementation and assessed our overall safety program results against our initial safety performance targets and the action items identified. In addition, some of the processes and tools described in the initial PTASP have changed, which need reflected in a revised 2021 PTASP document.

## 3.0 PTASP Review Checklist

The PTASP Review Checklist is intended to verify compliance with the written PTASP components and an item that is checked has been verified as compliant. Any item that is not verified as compliant must have a comment that describes the action necessary to achieve compliance.

<input checked="" type="checkbox"/>	Checklist Item	PTASP Page Number	Comments
<input checked="" type="checkbox"/>	Name(s) and address(es) of the transit agency(ies) that the Agency Safety Plan applies to.	13	
<input checked="" type="checkbox"/>	Mode(s) of transit service covered by the Agency Safety Plan.	13	
<input checked="" type="checkbox"/>	Mode(s) of service provided by the transit agency (directly operated or contracted service).	13	
<input checked="" type="checkbox"/>	FTA funding types. (e.g., 5307, 5337, 5339)	13	
<input checked="" type="checkbox"/>	Transit service provided by the transit agency on behalf of another transit agency or entity, including a description of the arrangement(s).	13	

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<input checked="" type="checkbox"/>	Checklist Item	PTASP Page Number	Comments
<input checked="" type="checkbox"/>	An Accountable Executive who meets requirements in § 673.5 and § 673.23(d)(1).	7, 13	
<input checked="" type="checkbox"/>	A Chief Safety Officer or SMS Executive who meets requirements in § 673.5 and § 673.23(d)(2).	7, 13	

Plan Development, Approval, and Updates

<input checked="" type="checkbox"/>	Checklist Item	PTASP Page Number	Comments
<input checked="" type="checkbox"/>	Name of the entity that drafted the Agency Safety Plan (e.g., State Department of Transportation).	15	
<input checked="" type="checkbox"/>	The Accountable Executive's signature on the Agency Safety Plan and date of signature.	15	
<input checked="" type="checkbox"/>	The Board of Directors' or Equivalent Authority's approval of the Agency Safety Plan and date of approval.	15	
<input type="checkbox"/>	Certification of compliance with Part 673, including the name of the individual or entity that certifies the Agency Safety Plan and date of certification.	15	<i>Blank – Look at including in next revision</i>
<input checked="" type="checkbox"/>	Process and timeline for conducting an annual review and update of the Agency Safety Plan, including the Agency Safety Plan version number and other relevant information.	15	
<input checked="" type="checkbox"/>	The Agency Safety Plan addresses all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan.	6	

## Safety Performance Targets

<input checked="" type="checkbox"/>	Checklist Item	PTASP Page Number	Comments
<input checked="" type="checkbox"/>	<i>Fatalities:</i> Total number of reportable fatalities and rate per total vehicle revenue miles, by mode.	19	
<input checked="" type="checkbox"/>	<i>Injuries:</i> Total number of reportable injuries and rate per total vehicle revenue miles, by mode.	19	
<input checked="" type="checkbox"/>	<i>Safety Events:</i> Total number of reportable events and rate per total vehicle revenue miles, by mode. (Event, as defined in § 673.5)	19	
<input checked="" type="checkbox"/>	<i>System Reliability:</i> Mean (or average) distance between major mechanical failures, by mode.	19	
<input type="checkbox"/>	Performance targets are made available to the State to aid in the planning process.	19	<i>Missing Date Targets</i>
<input type="checkbox"/>	Performance targets are made available to the Metropolitan Planning Organization(s) (MPOs) to aid in the planning process.	19	<i>Metropolitan Planning Organization Name has CPUC as well as SCAG. A place holder is provided for date transmitted to the MPO. Transmittal occurred on ...</i>
<input checked="" type="checkbox"/>	Coordination with the State and MPO(s) in the selection of State and MPO safety performance targets, to the maximum extent practicable.	19	

## Safety Management Policy

<input checked="" type="checkbox"/>	Checklist Item	PTASP Page Number	Comments
<input checked="" type="checkbox"/>	Written statement of Safety Management Policy (SMP), including the agency's safety objectives.	19 - 20	
<input checked="" type="checkbox"/>	Employee safety reporting program, that includes: <ul style="list-style-type: none"> <li>• A process that allows employees to report safety conditions to senior management;</li> <li>• Protections for employees who report safety conditions to senior management; and</li> <li>• A description of employee behaviors that may result in disciplinary action, and therefore are excluded from protection.</li> </ul>	20 - 23	
<input checked="" type="checkbox"/>	Communication of the safety management policy throughout the agency's organization.	23	
<input checked="" type="checkbox"/>	Authorities, accountabilities, and responsibilities necessary for the management of safety, as they relate to the development and management of the transit agency's Safety Management System (SMS), for the following individuals: <ul style="list-style-type: none"> <li>• The Accountable Executive</li> <li>• The Chief Safety Officer or SMS Executive</li> <li>• Agency leadership and executive management</li> <li>• Key staff</li> </ul>	23 - 28	



## Safety Risk Management

<input checked="" type="checkbox"/>	Checklist Item	PTASP Page Number	Comments
<input checked="" type="checkbox"/>	<i>Safety hazard identification:</i> Methods or processes to identify hazards and consequences of hazards, which includes data and information provided by an oversight authority and the FTA as sources for hazard identification.	29 - 30	
<input checked="" type="checkbox"/>	<i>Safety risk assessment:</i> Methods or processes to assess the safety risks associated with identified safety hazards. This must include assessment of the likelihood and severity of the consequences of the hazards, including existing mitigations, and prioritization of the hazards based on the safety risk.	49 Appendix B	
<input checked="" type="checkbox"/>	<i>Safety risk mitigation:</i> Methods or processes to identify mitigations or strategies necessary as a result of the agency's safety risk assessment to reduce the likelihood and severity of the consequences of hazards.	31 – 33, 37 - 38	

## Safety Assurance

<input checked="" type="checkbox"/>	Checklist Item	PTASP Page Number	Comments
<input checked="" type="checkbox"/>	Activities to monitor the transit agency's system for compliance with, and sufficiency of, the agency's procedures for operations and maintenance. ( <i>safety performance monitoring and measurement</i> )	35	
<input checked="" type="checkbox"/>	Activities to monitor the transit agency's operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended. ( <i>safety performance monitoring and measurement</i> )	37 - 38	
<input checked="" type="checkbox"/>	Activities to conduct investigations of safety events, including the identification of causal factors. ( <i>safety performance monitoring and measurement</i> )	38 - 39	
<input checked="" type="checkbox"/>	Activities to monitor information reported through any internal safety reporting programs. ( <i>safety performance monitoring and measurement</i> )	39 - 40	
<input checked="" type="checkbox"/>	<i>Management of change:</i> A process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance. These proposed changes must be evaluated through the agency's Safety Risk Management process.	40	<i>Notes OCTA's Configuration management Policy Change Control</i>
<input checked="" type="checkbox"/>	<i>Continuous improvement:</i> A process to assess the transit agency's safety performance. If the agency identifies safety deficiencies as part of its safety performance assessment, the agency must develop and carry out, under the direction of the Accountable Executive, a plan to address the identified safety deficiencies.	41 - 42	

## Safety Promotion

<input checked="" type="checkbox"/>	Checklist Item	PTASP Page Number	Comments
<input checked="" type="checkbox"/>	A comprehensive safety training program for all transit agency employees and contractors designated as directly responsible for safety in the agency's public transportation system. This program must include refresher training, as necessary.	43 - 44	
<input checked="" type="checkbox"/>	Communication of safety and safety performance information throughout the transit agency's organization that conveys, at a minimum: <ul style="list-style-type: none"> <li>Information on hazards and safety risks relevant to employees' roles and responsibilities; and</li> <li>Safety actions taken in response to reports submitted through an employee safety reporting program.</li> </ul>	44 - 46	
<input checked="" type="checkbox"/>	Checklist Item	PTASP Page Number	Comments
<input checked="" type="checkbox"/>	Documentation not included or referenced elsewhere in the Agency Safety Plan, related to: <ul style="list-style-type: none"> <li>The implementation of the transit agency's Safety Management System;</li> <li>The programs, policies, and procedures that the agency uses to carry out its Agency Safety Plan; and</li> <li>Results from Safety Management System processes and activities.</li> </ul> <i>The documents must be maintained for three years after they are created and must be made available upon request by the FTA or other Federal entity, or a State Safety Oversight Agency having jurisdiction.</i>	45 - 46 Appendix D	
<input checked="" type="checkbox"/>	Definitions of terms used in the Agency Safety Plan.	7 - 9	
<input checked="" type="checkbox"/>	List of acronyms used in the Agency Safety Plan.	10	

**4.0 Safety Performance Targets****Bus**

	Goal	Actual	Status	Detail
Fatalities	0	1	Not Achieved	*See Note
Injuries	81	33	Achieved	
Safety Events	133	116	Achieved	
Miles Between Riad Calls	14,827	14,463	Achieved	

\*Fatality due to suicide – not a result of system or operator activity

	Objective	Metric	Target	Actuals
<b>Bus</b>	Reduce Fatalities	Fatalities per 100K VRM	0.00	0.007
	Reduce Injuries	Injuries per 100K VRM	0.59	0.22
	Reduce Safety Events	Safety Events per 100K VRM	1.03	0.80
	Maintain System Reliability	Miles between Road Calls	1 per 14K VRM	15,746

**Paratransit**

	Goal	Actual	Status	Detail
Fatalities	0	0	Achieved	
Injuries	0	0	Achieved	
Safety Events	0	0	Achieved	
Miles Between Riad Calls	14,827	28,822	Achieved	

	Objective	Metric	Target	Actuals
<b>Paratransit</b>	Reduce Fatalities	Fatalities per 100K VRM	0.00	0.00
	Reduce Injuries	Injuries per 100K VRM	0.00	0.00
	Reduce Safety Events	Safety Events per 100K VRM	0.00	0.00
	Maintain System Reliability	Miles between Road Calls	1 per 14K VRM	28,822

**5.0 Implementation Actions**

## Appendix A

<b>PTASP/FTA Code</b>	<b>Action Item</b>	<b>Timeline</b>	<b>Responsible Person / Group</b>	<b>Status</b>
673.23	Establish and implement PTASP/SMS Committee	Q1	HSEC/Planning	Achieved
673.23	Establish safety performance targets and objectives	Q1	PTASP/SMS Committee	Achieved
673.23	Engage the Contracted Services Management in PTASP expectations/requirements	Q1	HSEC / Operations	Achieved
673.31	Establish a Documentation Control/Management System (Records Management)	Q1	Information Systems / HSEC	Achieved
673.23	Implement PTASP through the Board of Directors	Q2 (May)	CEO/Planning/HSEC/Operations	Achieved
5323	Submit Certification of Assurance to the FTA	Q2 (July)	Finance and Administration / Government Affairs / HSEC	Achieved
673.23	Safety Management Policy Communication –	Q2	HSEC / HR / Operations	Achieved
673.29	Establish SMS communication tools and strategy	Q3	HSEC / External and Internal Communications	Achieved
	Expand on existing hazard reporting systems to include anonymous reporting	Q3	IS / HSEC / Operations	Achieved
673.25	Identify and implement a Risk Assessment process (All new hazards)	Q4	PTASP/SMS Committee / Operations / HSEC	Achieved
673.27	Establish a hazard/risk mitigation monitoring process	Q4	PTASP/SMS Committee / Operations / HSEC	Not Achieved – Pending Origami electronic tool development.
673.27	Establish a single data depository for safety and SMS data - Create dashboard for summary and real time analysis	Q4	Information Systems / HSEC / Operations	Not Achieved – Pending Origami electronic tool development

PUBLIC TRANSPORTATION AGENCY SAFETY PLAN ANNUAL REVIEW

	- Safety performance monitoring and measuring			
673.29	Identify and establish SMS training requirements for OCTA staff and contractors	Q4	HSEC / Learning & Development / Operations	Achieved
673.27	Conduct a safety culture survey to assess existing status	Q4	HSEC / HR	Not Achieved – Delayed due to COVID-19 pandemic and prioritization of other related surveys. <b>Completed: April 2020</b>

PTASP/FTA Code	Action Item	Timeline	Responsible Person / Group	Status
673.27	Annual PTASP review and updates	Q2 2021 (June)	CEO / Chief Safety Officer / SMS/PTASP Committee	Achieved
673.23	Incorporate OC Streetcar into the PTASP and submit draft to the CPUC for review/approval	Q2 2021 (April)	HSEC / Operations	Not Achieved – Delayed due to construction schedule challenged /delays. Propose incorporating Streetcar into 2022 revision
673.23	Submit updated PTASP through the Board of Directors to OC Streetcar detail	Q2 2021 (July)	CEO / HSEC / Operations	Pending – On Target
673.27	Independent PTASP/SMS audit utilizing contractor, consultant, or other organization	Q2 2022 (June)	HSEC / Internal Audit	Pending – On Target

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673.25	Complete a formal risk analysis for existing operational hazards	Q4 2022	HSEC / Operations	Pending – On Target
673.27	FTA Triennial Review to include PTASP/SMS	Q4 2022	Government Relations / HSEC / Operations	Pending – On Target

In review of the action items list, all items that required action and the allocation of resources were either completed on-time or delayed due to unforeseen circumstances caused by the COVID-19 pandemic. In total, out of the fourteen established action items, eleven were completed on time, one was delayed by four months, and two are still pending completion.

### **6.0 Areas of Improvement**

#### Other areas of Review

1. Roles and Responsibilities – Opportunity for improvement
  - a. Action item(S)
    - i. Ownership and communication of safety performance targets and status on responsible party (Operations Management, Maintenance Management)
  - b. PTASP communications
    - i. Launch Safety Survey Results Communications

#### **PTASP Edits or Proposed Changes:**

Section	Proposed Edit/Change
4.0	Adopt new Paratransit miles between roadcalls safety performance target to 25,000 miles.
Acronyms, 6.3, 7.1, 7.3	Change OTS references to Origami
Appendix B	Update risk assessment process to reflect changes in risk ranking/rating criteria and designed features within Origami.
Appendix A	Adopt a new timeline date for incorporation of OC Streetcar into PTASP - 2022 PTASP update
Appendix A	Adopt new timeline for Establishment of a hazard/risk mitigation monitoring process – Q4 2021 (December)
Appendix A	Adopt new timetable for the establishment a single data depository for safety and SMS data / dashboard – Q4 2021 (December)

## 7.0 Summary

OCTA met all the established safety performance targets except for fatalities. OCTA experienced one fatality. This was a non-preventable event and did not occur due to any action or failure of the system or the Coach Operator.

OCTA fixed route bus performance actuals were 0.007 fatalities per 100,000 VRM, 0.22 injuries per 100 VRM, and 0.80 safety events per 100,000 VRM. For system reliability, the fixed route bus actuals for directly operated service was one road call per 17,080 VRM and for contracted fixed route was one road call per 14,412 VRM.

OCTA paratransit service actuals were 0.00 fatalities per 100,000 VRM, 0.00 injuries per 100 VRM, and 0.00 safety events per 100,000 VRM for system reliability, the paratransit actuals were one road call per 28,822.

Communications have been sent out to capture employee engagement which include the PTASP / SMS acknowledgement form, safety performance goals and the safety culture survey.

## 8.0 2021 Proposed Performance Targets

### Bus

	Objective	Metric	Baseline	Target
Bus	Reduce Fatalities	Fatalities per 100K VRM	0.00	Maintain
	Reduce Injuries	Injuries per 100K VRM	0.59	Maintain
	Reduce Safety Events	Safety Events per 100K VRM	1.03	Maintain
	Maintain System Reliability	Miles between Road Calls	1 per 14K VRM	Maintain

### Paratransit

	Objective	Metric	Baseline	Target
Paratransit	Reduce Fatalities	Fatalities per 100K VRM	0.00	Maintain
	Reduce Injuries	Injuries per 100K VRM	0.00	Maintain
	Reduce Safety Events	Safety Events per 100K VRM	0.00	Maintain
	Maintain System Reliability	Miles between Road Calls	1 per 25K VRM	Maintain




**9.0 Annual Review Certification**

By signing below, you certify that the annual review has been completed and the information captured is accurate.

  
\_\_\_\_\_

6/9/21

Valerie Steinbeck, PTASP Program Manager

  
\_\_\_\_\_


6/9/21

Matthew DesRosier, Chief Safety Officer



**August 2, 2021**

**To:** Executive Committee

**From:** Darrell E. Johnson, Chief Executive Officer 

**Subject:** Capital Programs Division - Fourth Quarter Fiscal Year 2020-21 and Planned Fiscal Year 2021-22 Capital Action Plan Performance Metrics

### **Overview**

Staff has prepared a quarterly progress report on capital project delivery for the period of April 2021 through June 2021, for review by the Orange County Transportation Authority Board of Directors. This report highlights the Capital Action Plan for project delivery, which is used as a performance metric to assess delivery progress on highway, transit, and rail projects.

### **Recommendation**

Receive and file as an information item.

### **Background**

The Orange County Transportation Authority (OCTA) delivers highway, transit, rail, and facility projects from the beginning of the environmental approval phase through construction completion. Project delivery milestones are planned carefully with consideration of project scope, costs, schedule, and assessment of risks. The milestones reflected in the Capital Action Plan (CAP) are OCTA's planned and budgeted major project delivery commitments.

This report is a quarterly progress report on the CAP performance metrics, which are a snapshot of the planned CAP project delivery milestones in the budgeted fiscal year (FY).

### **Discussion**

OCTA's objective is to deliver projects on schedule and within the approved project budget. Key project cost and schedule commitments are captured in the CAP (Attachment A), which is regularly updated with project status and any new

projects. The CAP is categorized into four key project groupings of freeway, railroad grade separation, and rail and station projects. Schedule milestones are used as performance indicators of progress in project delivery. The CAP performance metrics report provides a FY snapshot of the milestones targeted for delivery in the FY and provides transparency and performance measurement of capital project delivery.

The CAP project costs represent the total cost across all phases of project delivery, including support costs, right-of-way (ROW), and construction capital costs. Baseline costs, if established, are shown in comparison to either the actual or forecast cost. Baseline costs may be shown as to-be-determined (TBD) if project scoping studies and estimates have not been developed or approved, and may be updated as delivery progresses and milestones are achieved. Projects identified in the Orange County local transportation sales tax Measure M2 (M2) are identified with the corresponding M2 project logo. The CAP status update is also included in the M2 Quarterly Progress Report.

The CAP summarizes the very complex capital project critical path delivery schedules into eight key milestones.

Begin Environmental	The date work on the environmental clearance, project report, or preliminary engineering phase begins.
Complete Environmental	The date environmental clearance and project approval is achieved.
Begin Design	The date final design work begins, or the date when a design-build contract begins.
Complete Design	The date final design work is 100 percent complete and approved.
Construction Ready	The date contract bid documents are ready for advertisement, including certification of ROW, all agreements executed, and contract constraints cleared.
Advertise for Construction	The date a construction contract is advertised for construction bids.
Award Contract	The date the construction contract is awarded.

**Construction Complete**

The date all construction work is completed, and the project is open to public use.

These delivery milestones reflect progression across the project delivery phases shown below.



Project schedules reflect planned baseline milestone dates in comparison to forecast or actual milestone dates. Milestone dates may be shown as TBD if project scoping or approval documents have not been finalized and approved, or if the delivery schedule has not been negotiated with a partnering agency or consultant implementing the specific phase of a project. Planned milestone dates can be revised to reflect new dates from approved baseline schedule changes. Project schedules are reviewed monthly, and milestone achievements and updated forecast dates are included to reflect project delivery status.

CAP milestones achieved in the fourth quarter FY 2020-21 include:

**Freeway Projects**

- The begin design milestone for the Interstate 5 (I-5) widening between Yale Avenue and State Route 55 (SR-55) was achieved. This is the northerly of two segments of I-5 widening between Interstate 405 (I-405) and SR-55. The I-5 widening segment from I-405 to Yale Avenue is planned to begin final design in October 2021.

The following CAP milestones missed the planned delivery through the fourth quarter of FY 2020-21:

- The Placentia Metrolink Station construction ready, advertise construction, and award contract milestones were missed. BNSF Railway Company (BNSF) approvals are required to construct the project and are dependent on finalization of a shared-use agreement between Metrolink and BNSF for rail operations on the BNSF rail corridor. A working recovery schedule to implement this project is TBD.
- The construction ready milestone for the SR-55 widening from I-405 to I-5 was not achieved due to extremely complex ROW acquisitions required to construct the project. Negotiations are underway to acquire

the remaining needed property rights. The working schedule considers potential eminent domain Board of Directors (Board) actions and court filings to gain ROW possession. The target to certify that possession, or a clear path to gaining possession, of the remaining ROW needed for construction is in late August 2021.

#### Recap of FY 2020-21 Performance Metrics

The performance metrics snapshot provided at the beginning of FY 2020-21 reflected 15 planned major project delivery milestones to be accomplished in the FY. The CAP and performance metrics have been updated to reflect both the milestones achieved and missed through the fourth quarter of FY 2020-21 (Attachment B). Eleven of the 15 milestones (73.3 percent) planned in FY 2020-21 were achieved. Three of the four milestones missed are attributable to the Placentia Metrolink Station delays related to BNSF approvals.

#### New FY 2021-22 Performance Metrics

The CAP and performance metrics have been updated with the latest project status, and there are seven major project delivery milestones planned in FY 2021-22 (Attachment C). While there are not many milestones scheduled for delivery in FY 2021-22, there are many activities underway on major projects including environmental studies, final design, ROW acquisition, utility relocation, and construction.

#### FY 2021-22 Cost and Performance Metrics Risks

The construction ready milestone for the SR-55 widening from I-405 to I-5, targeted in late August 2021, is very aggressive and staff is working with the California Department of Transportation to clear all project constraints including certification of ROW, and that funding allocations are in place to deem the project construction ready.

On the OC Streetcar project, staff continues to work with the Federal Transit Administration (FTA) and FTA's project management oversight consultant on a comprehensive project risk, cost, and schedule assessment to determine the new forecast cost and schedule. This takes into account risks realized and an assessment of remaining risks to develop required cost and schedule forecast adjustments. Staff will bring the updated cost and schedule forecast to the Board by November 2021.

Highway project construction bids in the region are reflecting a variable market, still with higher number of bidders, but with great variations in pricing. Steel, lumber, fuel, and labor pricing is still tracking high. Contractors have reported material availability shortages of common reinforcing bar steel and polyvinyl chloride electrical conduit. Staff will continue to monitor market pricing trends and material availability along with the impacts on heavy civil construction in the region.

### ***Summary***

Capital project delivery continues to progress and is reflected in the CAP. The planned FY 2021-22 performance metrics created from forecast project schedules will be used as a general project delivery performance indicator throughout the FY. Staff will continue to manage project costs and schedules across all project phases to meet project delivery commitments and report quarterly.

### ***Attachments***

- A. Capital Action Plan, Status Through June 2021
- B. Capital Programs Division, Fiscal Year 2020-21 Performance Metrics Through June 2021
- C. Capital Programs Division, Fiscal Year 2021-22 Performance Metrics Plan

**Prepared by:**



James G. Beil, P.E.  
Executive Director, Capital Programs  
(714) 560-5646

**Capital Action Plan**

Status Through June 2021

Updated: July 15, 2021

Capital Projects	Cost Baseline/Forecast (millions)	Schedule Plan/Forecast							
		Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
<b>Freeway Projects:</b>									
I-5, Pico to San Diego County	TBD	Feb-21	Apr-24	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	Feb-21	Apr-24	TBD	TBD	TBD	TBD	TBD	TBD
I-5, Pico to Vista Hermosa	\$113.0	Jun-09	Dec-11	Jun-11	Oct-13	Feb-14	Oct-14	Dec-14	Aug-18
Project C	\$83.6	Jun-09	Oct-11	Jun-11	Oct-13	May-14	Sep-14	Dec-14	Aug-18
I-5, Vista Hermosa to Pacific Coast Highway	\$75.6	Jun-09	Dec-11	Jun-11	Feb-13	Jun-13	Oct-13	Dec-13	Mar-17
Project C	\$75.3	Jun-09	Oct-11	Jun-11	May-13	Aug-13	Feb-14	Jun-14	Jul-17
I-5, Pacific Coast Highway to San Juan Creek Road	\$70.7	Jun-09	Dec-11	Jun-11	Jan-13	May-13	Aug-13	Oct-13	Sep-16
Project C	\$74.3	Jun-09	Oct-11	Jun-11	Jan-13	Apr-13	Aug-13	Dec-13	Jul-18
I-5, I-5/Ortega Interchange	\$90.9	Sep-05	Jun-09	Jan-09	Nov-11	Mar-12	Jun-12	Aug-12	Sep-15
Project D	\$79.8	Sep-05	Jun-09	Jan-09	Dec-11	Apr-12	Jun-12	Aug-12	Jan-16
I-5, I-5/Ortega Interchange (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Project D	N/A	N/A	N/A	Jan-14	Oct-14	Feb-15	Aug-15	Sep-15	Sep-16
I-5, SR-73 to Oso Parkway	\$151.9	Sep-11	Jun-14	Mar-15	Jan-18	May-18	Aug-18	Dec-18	Apr-25
Project C & D	\$195.8	Oct-11	May-14	Mar-15	Aug-18	May-19	Aug-19	Dec-19	Apr-25
I-5, Oso Parkway to Alicia Parkway	\$196.2	Sep-11	Jun-14	Nov-14	Jun-17	Dec-17	Feb-18	Jun-18	Nov-23
Project C & D	\$203.1	Oct-11	May-14	Nov-14	Dec-17	Jun-18	Nov-18	Mar-19	Dec-23
I-5, Alicia Parkway to El Toro Road	\$133.6	Sep-11	Jun-14	Mar-15	Jun-18	Dec-18	Jan-19	May-19	Oct-24
Project C	\$165.9	Oct-11	May-14	Mar-15	May-19	Apr-20	May-20	Sep-20	Oct-24
I-5, SR-73 to El Toro Road (Landscape)	TBD	N/A	N/A	TBD	TBD	TBD	TBD	TBD	TBD
Project C	\$12.4	N/A	N/A	Jul-22	Mar-24	Jul-24	Sep-24	Nov-24	Jun-26
I-5, I-5/El Toro Road Interchange	TBD	Apr-17	Nov-19	TBD	TBD	TBD	TBD	TBD	TBD
Project D	TBD	Apr-17	Jul-22	TBD	TBD	TBD	TBD	TBD	TBD
I-5, I-405 to Yale Avenue	\$230.5	May-14	Aug-18	TBD	TBD	TBD	TBD	TBD	TBD
Project B	\$230.5	May-14	Jan-20	Oct-21	Jun-24	Dec-24	Apr-25	Aug-25	Feb-29
I-5, Yale Avenue to SR-55	\$200.4	May-14	Aug-18	May-21	TBD	TBD	TBD	TBD	TBD
Project B	\$200.4	May-14	Jan-20	May-21	Jan-24	Jul-24	Nov-24	Mar-25	Sep-28
I-5, SR-55 to SR-57	\$38.1	Jul-11	Jun-13	Jun-15	Mar-17	Jul-17	Sep-17	Dec-17	Apr-21
Project A	\$39.4	Jun-11	Apr-15	Jun-15	Jun-17	Dec-17	Mar-18	Nov-18	Jan-21
SR-55, I-405 to I-5	\$410.9	Feb-11	Nov-13	Sep-17	Apr-20	Dec-20	Apr-21	Jul-21	Aug-25
Project F	\$503.2	May-11	Aug-17	Sep-17	Apr-20	Sep-21	Dec-21	Apr-22	Apr-26
<b>Cost/Schedule Risk</b>									

## Capital Action Plan

Status Through June 2021

Updated: July 15, 2021

Capital Projects	Cost Baseline/Forecast (millions)	Schedule Plan/Forecast							
		Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
SR-55, I-5 to SR-91 Project F	\$131.3 \$131.3	Dec-16 Dec-16	Jan-20 Mar-20	TBD Jun-22	TBD Jun-25	TBD Nov-25	TBD Feb-26	TBD Jun-26	TBD Jul-29
SR-57 Northbound (NB), Orangewood Avenue to Katella Avenue Project G	\$71.8 \$71.8	Apr-16 Apr-16	Dec-18 Mar-19	TBD Jan-22	TBD Mar-24	TBD Jul-24	TBD Nov-24	TBD Mar-25	TBD Oct-27
SR-57 (NB), Katella Avenue to Lincoln Avenue Project G	\$78.7 \$38.0	Apr-08 Apr-08	Jul-09 Nov-09	Jul-08 Aug-08	Nov-10 Dec-10	Mar-11 Apr-11	May-11 Jul-11	Aug-11 Oct-11	Sep-14 Apr-15
SR-57 (NB), Katella Avenue to Lincoln Avenue (Landscape) Project G	N/A N/A	N/A N/A	N/A N/A	N/A May-09	N/A Jul-10	N/A Jun-17	N/A Jul-17	N/A Sep-17	N/A Jun-18
SR-57 (NB), Orangethorpe Avenue to Yorba Linda Boulevard Project G	\$80.2 \$52.3	Aug-05 Aug-05	Dec-07 Dec-07	Feb-08 Feb-08	Dec-09 Jul-09	Apr-10 Dec-09	Jun-10 May-10	Oct-10 Oct-10	May-14 Nov-14
SR-57 (NB), Yorba Linda Boulevard to Lambert Road Project G	\$79.3 \$54.1	Aug-05 Aug-05	Dec-07 Dec-07	Feb-08 Feb-08	Jul-09 Jul-09	Apr-10 Mar-10	Jun-10 May-10	Oct-10 Oct-10	Sep-14 May-14
SR-57 (NB), Orangethorpe Avenue to Lambert Road (Landscape) Project G	N/A N/A	N/A N/A	N/A N/A	N/A Oct-14	N/A Aug-17	N/A Dec-17	N/A Jan-18	N/A Feb-18	N/A Apr-19
SR-57 (NB), Lambert Road to Tonner Canyon Project G	TBD TBD	TBD Jan-23	TBD Jun-25	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
SR-91 Westbound (WB), I-5 to SR-57 Project H	\$78.1 \$59.2	Jul-07 Jul-07	Apr-10 Jun-10	Oct-09 Mar-10	Feb-12 Apr-12	Jul-12 Aug-12	Aug-12 Oct-12	Nov-12 Jan-13	Apr-16 Jun-16
SR-91 Westbound (WB), I-5 to SR-57 (Landscape) Project H	N/A N/A	N/A N/A	N/A N/A	N/A Nov-14	N/A Aug-16	N/A Dec-16	N/A Feb-17	N/A Mar-17	N/A Nov-17
SR-91, SR-55 to Lakeview Avenue (Segment 1) Project I	\$100.9 \$100.9	Jan-15 Jan-15	Oct-18 Jun-20	Mar-20 Mar-20	Jan-23 Jan-23	Aug-23 Aug-23	Oct-23 Oct-23	Feb-24 Feb-24	Sep-27 Sep-27
SR-91, La Palma Avenue to SR-55 (Segment 2) Project I	\$208.4 \$208.4	Jan-15 Jan-15	Oct-18 Jun-20	Jun-20 Jun-20	Jul-23 Jul-23	Feb-24 Feb-24	Mar-24 Mar-24	Jul-24 Jul-24	Mar-28 Mar-28
SR-91, Acacia Street to La Palma Ave (Segment 3) Project I	\$116.2 \$116.2	Jan-15 Jan-15	Oct-18 Jun-20	Nov-20 Nov-20	Apr-24 Apr-24	Nov-24 Nov-24	Jan-25 Jan-25	Apr-25 Apr-25	Sep-28 Sep-28
SR-91 (WB), Tustin Interchange to SR-55 Project I	\$49.9 \$42.5	Jul-08 Jul-08	Jul-11 May-11	Jul-11 Jun-11	Mar-13 Feb-13	Jul-13 Apr-13	Aug-13 Jun-13	Oct-13 Oct-13	Jul-16 Jul-16
SR-91, SR-55 to SR-241 Project J	\$128.4 \$79.7	Jul-07 Jul-07	Jul-09 Apr-09	Jun-09 Apr-09	Jan-11 Aug-10	Apr-11 Dec-10	Jun-11 Feb-11	Sep-11 May-11	Dec-12 Mar-13



# Capital Action Plan

Status Through June 2021

Updated: July 15, 2021

Capital Projects	Cost Baseline/Forecast (millions)	Schedule Plan/Forecast							
		Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
SR-91, SR-55 to SR-241 (Landscape) Project J	N/A N/A	N/A N/A	N/A N/A	N/A May-12	N/A Feb-13	N/A Apr-13	N/A Jul-13	N/A Oct-13	N/A Feb-15
SR-91 Eastbound, SR-241 to SR-71 Project J	\$104.5 \$57.8	Mar-05 Mar-05	Dec-07 Dec-07	Jul-07 Jul-07	Dec-08 Dec-08	Mar-09 May-09	May-09 Jun-09	Jul-09 Aug-09	Nov-10 Jan-11
91 Express Lanes to SR-241 Toll Connector	TBD TBD	N/A Nov-13	N/A Jan-20	N/A Jun-16	N/A Aug-22	N/A Mar-23	N/A Apr-23	N/A Sep-23	N/A Nov-25
I-405, I-5 to SR-55 Project L	TBD TBD	Dec-14 Dec-14	Jul-18 Aug-18	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
I-405, SR-55 to I-605 (Design-Build) Project K	\$2,080.2 \$2,080.2	Mar-09 Mar-09	Mar-13 May-15	Mar-14 Mar-14	Nov-15 Nov-15	Feb-16 Feb-16	Mar-16 Mar-16	Nov-16 Nov-16	Feb-24 Feb-24
I-405/SR-22 HOV Connector	\$195.9 \$120.8	N/A N/A	N/A N/A	Sep-07 Sep-07	Sep-09 Jun-09	Mar-10 Sep-09	May-10 Feb-10	Aug-10 Jun-10	Aug-14 Mar-15
I-405/I-605 HOV Connector	\$260.4 \$172.6	N/A N/A	N/A N/A	Sep-07 Sep-07	Sep-09 Sep-09	Mar-10 Feb-10	May-10 May-10	Oct-10 Oct-10	Jan-15 Mar-15
I-405/SR-22/I-605 HOV Connector (Landscape)	N/A N/A	N/A N/A	N/A N/A	N/A Jun-08	N/A May-09	N/A Feb-16	N/A May-16	N/A Jul-16	N/A Feb-18
I-605, I-605/Katella Interchange Project M	\$29.0 \$29.0	Aug-16 Aug-16	Nov-18 Oct-18	TBD Dec-20	Mar-23 Mar-23	Jul-23 Jul-23	Nov-23 Nov-23	Feb-24 Feb-24	Nov-25 Nov-25
<b>Grade Separation Projects:</b>									
Sand Canyon Avenue Railroad Grade Separation Project R	\$55.6 \$61.9	N/A N/A	Sep-03 Sep-03	Jan-04 Jan-04	Jul-10 Jul-10	Jul-10 Jul-10	Oct-10 Oct-10	Feb-11 Feb-11	May-14 Jan-16
Raymond Avenue Railroad Grade Separation Project O	\$77.2 \$126.2	Feb-09 Feb-09	Nov-09 Nov-09	Mar-10 Mar-10	Aug-12 Dec-12	Nov-12 Jul-13	Feb-13 Oct-13	May-13 Feb-14	Aug-18 May-18
State College Boulevard Railroad Grade Separation (Fullerton) Project O	\$73.6 \$99.6	Dec-08 Dec-08	Jan-11 Apr-11	Jul-06 Jul-06	Aug-12 Feb-13	Nov-12 May-13	Feb-13 Sep-13	May-13 Feb-14	May-18 Mar-18
Placentia Avenue Railroad Grade Separation Project O	\$78.2 \$64.5	Jan-01 Jan-01	May-01 May-01	Jan-09 Jan-09	Mar-10 Jun-10	May-10 Jan-11	Mar-11 Mar-11	Jun-11 Jul-11	Nov-14 Dec-14
Kraemer Boulevard Railroad Grade Separation Project O	\$70.4 \$63.8	Jan-01 Jan-01	Sep-09 Sep-09	Jan-09 Feb-09	Jul-10 Jul-10	Jul-10 Jan-11	Apr-11 Jun-11	Aug-11 Sep-11	Oct-14 Dec-14
Orangethorpe Avenue Railroad Grade Separation Project O	\$117.4 \$105.9	Jan-01 Jan-01	Sep-09 Sep-09	Feb-09 Feb-09	Dec-11 Oct-11	Dec-11 Apr-12	Feb-12 Sep-12	May-12 Jan-13	Sep-16 Oct-16



# Capital Action Plan

Status Through June 2021

Updated: July 15, 2021

Capital Projects	Cost Baseline/Forecast (millions)	Schedule Plan/Forecast							
		Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
Tustin Avenue/Rose Drive Railroad Grade Separation Project O	\$103.0 \$96.6	Jan-01 Jan-01	Sep-09 Sep-09	Feb-09 Feb-09	Dec-11 Jul-11	Mar-12 Jun-12	May-12 Oct-12	Aug-12 Feb-13	May-16 Oct-16
Lakeview Avenue Railroad Grade Separation Project O	\$70.2 \$110.7	Jan-01 Jan-01	Sep-09 Sep-09	Feb-09 Feb-09	Oct-11 Jan-13	Oct-12 Apr-13	Feb-13 Sep-13	May-13 Nov-13	Mar-17 Jun-17
17th Street Railroad Grade Separation Project R	TBD TBD	Oct-14 Oct-14	Jun-16 Nov-17	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
<b>Rail and Station Projects:</b>									
Rail-Highway Grade Crossing Safety Enhancement Project R	\$94.4 \$90.4	Jan-08 Jan-08	Oct-08 Oct-08	Jan-08 Jan-08	Sep-08 Sep-08	Sep-08 Sep-08	Sep-08 Sep-08	Aug-09 Aug-09	Dec-11 Dec-11
San Clemente Beach Trail Safety Enhancements Project R	\$6.0 \$5.0	Sep-10 Sep-10	Jul-11 Jul-11	Feb-12 Feb-12	Apr-12 Jun-12	Apr-12 Jun-12	Jul-12 Oct-12	Oct-12 May-13	Jan-14 Mar-14
San Juan Capistrano Passing Siding	\$25.3 \$36.4	Aug-11 Aug-11	Mar-14 Mar-14	Mar-15 Mar-15	May-16 Aug-18	May-16 Aug-18	Aug-16 Aug-18	Dec-16 Mar-19	Feb-21 Nov-20
OC Streetcar Project S	\$424.4 \$440.0	Aug-09 Aug-09	Mar-12 Mar-15	Feb-16 Feb-16	Sep-17 Nov-17	Oct-17 Dec-17	Dec-17 Dec-17	Aug-18 Sep-18	Dec-21 Oct-23
Placentia Metrolink Station and Parking Structure Project R	\$34.8 \$40.1	Jan-03 Jan-03	May-07 May-07	Oct-08 Oct-08	Jan-11 Feb-11	TBD TBD	TBD TBD	TBD TBD	TBD TBD
Orange County Maintenance Facility Project R	TBD TBD	Apr-20 Apr-20	Apr-22 Jul-22	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
Irvine Station Improvements Project R	TBD TBD	TBD Nov-21	TBD Dec-23	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
Anaheim Canyon Station	\$27.9 \$34.2	Jan-16 Jan-16	Dec-16 Jun-17	Mar-19 Mar-18	May-19 Oct-20	May-19 Oct-20	Jul-19 Oct-20	Nov-19 Mar-21	Jan-23 Jan-23
Orange Station Parking Expansion	\$33.2 \$30.9	Dec-09 Dec-09	Dec-12 May-16	Nov-10 Nov-10	Apr-13 Apr-16	Jul-16 Jul-16	Jul-16 Jul-16	Nov-16 Jun-17	Feb-19 Feb-19
Fullerton Transportation Center - Elevator Upgrades	\$3.5 \$4.2	N/A N/A	N/A N/A	Jan-12 Jan-12	Dec-13 Dec-13	Dec-13 Dec-13	Jun-14 Aug-14	Sep-14 Apr-15	Mar-17 May-19
Laguna Niguel/Mission Viejo Station ADA Ramps	\$3.5 \$5.0	Jul-13 Jul-13	Jan-14 Feb-14	Jul-13 Jul-13	Aug-14 Jul-15	Aug-14 Jul-15	Sep-14 Jul-15	Jan-15 Oct-15	Apr-17 Sep-17
Anaheim Regional Transportation Intermodal Center Project R & T	\$227.4 \$232.2	Apr-09 Apr-09	Feb-11 Feb-12	Jun-09 Jun-09	Feb-12 May-12	Feb-12 May-12	May-12 May-12	Jul-12 Sep-12	Nov-14 Dec-14



Capital Action Plan

Status Through June 2021

Updated: July 15, 2021

Capital Projects	Cost		Schedule						
	Baseline/Forecast		Plan/Forecast						
		(millions)	Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract

Note: Costs associated with landscape projects are included in respective freeway projects.

- Grey = Milestone achieved
- Green = Forecast milestone meets or exceeds plan
- Yellow = Forecast milestone is one to three months later than plan
- Red = Forecast milestone is over three months later than plan

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**Complete Environmental:** The date environmental clearance and project approval is achieved.  
**Begin Design:** The date final design work begins, or the date when a design-build contract begins.  
**Complete Design:** The date final design work is 100 percent complete and approved.  
**Construction Ready:** The date contract bid documents are ready for advertisement, including certification of right-of-way, all agreements executed, contract constraints are cleared.  
**Advertise for Construction:** The date a construction contract is both funded and advertised for bids.  
**Award Contract:** The date the construction contract is awarded.  
**Construction Complete:** The date all construction work is completed and the project is open to public use.

Acronyms

- I-5 - Santa Ana Freeway (Interstate 5)
- SR-73 - San Joaquin Freeway (State Route 73)
- SR-55 - Costa Mesa Freeway (State Route 55)
- SR-57 - Orange Freeway (State Route 57)
- SR-91 - Riverside Freeway (State Route 91)
- SR-133 - Laguna Freeway (State Route 133)
- SR-22 - Garden Grove Freeway (State Route 22)
- I-405 - San Diego Freeway (Interstate 405)
- SR-241 - Foothill/Eastern Transportation Corridor (State Route 241)
- I-605 - San Gabriel River Freeway (Interstate 605)
- ADA - Americans with Disabilities Act

## Capital Programs Division

### Fiscal Year 2020-21 Performance Metrics Through June 2021

#### Begin Environmental

Project Description	FY 21 Qtr 1		FY 21 Qtr 2		FY 21 Qtr 3		FY 21 Qtr 4		FY 21 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-5, Avenida Pico to San Diego County Line						✓	X		
Total Forecast/Actual	0	0	0	0	0	1	1	0	1

#### Complete Environmental

Project Description	FY 21 Qtr 1		FY 21 Qtr 2		FY 21 Qtr 3		FY 21 Qtr 4		FY 21 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
No "Complete Environmental" milestones scheduled for FY 2020-21									
Total Forecast/Actual	0	0	0	0	0	0	0	0	0

#### Begin Design

Project Description	FY 21 Qtr 1		FY 21 Qtr 2		FY 21 Qtr 3		FY 21 Qtr 4		FY 21 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
SR-91, Acacia Street to La Palma Avenue			X	✓					
I-605/Katella Avenue Interchange			X	✓					
I-5, Yale Avenue to SR-55							X	✓	
Total Forecast/Actual	0	0	2	2	0	0	1	1	3

#### Complete Design

Project Description	FY 21 Qtr 1		FY 21 Qtr 2		FY 21 Qtr 3		FY 21 Qtr 4		FY 21 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Anaheim Canyon Metrolink Station	X			✓					
Total Forecast/Actual	1	0	0	1	0	0	0	0	1

#### Construction Ready

Project Description	FY 21 Qtr 1		FY 21 Qtr 2		FY 21 Qtr 3		FY 21 Qtr 4		FY 21 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Anaheim Canyon Metrolink Station	X			✓					
Placentia Metrolink Station and Parking Structure					X				(missed)
SR-55, I-405 to I-5							X		(missed)
Total Forecast/Actual	1	0	0	1	1	0	1	0	3

#### Advertise Construction

Project Description	FY 21 Qtr 1		FY 21 Qtr 2		FY 21 Qtr 3		FY 21 Qtr 4		FY 21 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Anaheim Canyon Metrolink Station	X			✓					
Placentia Metrolink Station and Parking Structure					X				(missed)
Total Forecast/Actual	1	0	0	1	1	0	0	0	2

#### Award Contract

Project Description	FY 21 Qtr 1		FY 21 Qtr 2		FY 21 Qtr 3		FY 21 Qtr 4		FY 21 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-5, Alicia Parkway to El Toro Road	X	✓							
Anaheim Canyon Metrolink Station			X			✓			
Placentia Metrolink Station and Parking Structure							X		(missed)
Total Forecast/Actual	1	1	1	0	0	1	1	0	3

# Capital Programs Division

## Fiscal Year 2020-21 Performance Metrics Through June 2021

### Complete Construction

Project Description	FY 21 Qtr 1		FY 21 Qtr 2		FY 21 Qtr 3		FY 21 Qtr 4		FY 21 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
San Juan Capistrano Passing Siding				✓	X				
I-5, SR-55 to SR-57						✓	X		
Total Forecast/Actual	0	0	0	1	1	1	1	0	2

Totals	4	1	3	6	3	3	5	1	15
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**Begin Design:** The date final design work begins or the date when a design-build contract begins.

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#### Acronyms

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SR-55 - Costa Mesa Freeway (State Route 55)

SR-57 - Orange Freeway (State Route 57)

SR-91 - Riverside Freeway (State Route 91)

SR-133 - Laguna Freeway (State Route 133)

I-605 - San Gabriel River Freeway (Interstate 605)

I-405 - San Diego Freeway (Interstate 405)

SR-241 - Foothill/Eastern Transportation Corridor (State Route 241)

ADA - Americans with Disability Act

HOV - high-occupancy vehicle

X = milestone forecast in quarter

✓ = milestone accomplished in quarter

## Capital Programs Division Fiscal Year 2021-22 Performance Metrics Plan

### Begin Environmental

Project Description	FY 22 Qtr 1		FY 22 Qtr 2		FY 22 Qtr 3		FY 22 Qtr 4		FY 22 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Irvine Station Improvements			X						
Total Forecast/Actual	0	0	1	0	0	0	0	0	1

### Complete Environmental

Project Description	FY 22 Qtr 1		FY 22 Qtr 2		FY 22 Qtr 3		FY 22 Qtr 4		FY 22 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
No "Complete Environmental" milestones scheduled for FY 2021-22									
Total Forecast/Actual	0	0	0	0	0	0	0	0	0

### Begin Design

Project Description	FY 22 Qtr 1		FY 22 Qtr 2		FY 22 Qtr 3		FY 22 Qtr 4		FY 22 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-5, I-405 to Yale Avenue			X						
SR-57, Orangewood Avenue to Katella Avenue					X				
SR-55, I-5 to SR-91							X		
Total Forecast/Actual	0	0	1	0	1	0	1	0	3

### Complete Design

Project Description	FY 22 Qtr 1		FY 22 Qtr 2		FY 22 Qtr 3		FY 22 Qtr 4		FY 22 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
No "Complete Design" milestones scheduled for FY 2021-22									
Total Forecast/Actual	0	0	0	0	0	0	0	0	0

### Construction Ready

Project Description	FY 22 Qtr 1		FY 22 Qtr 2		FY 22 Qtr 3		FY 22 Qtr 4		FY 22 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
SR-55, I-405 to I-5	X								
Total Forecast/Actual	1	0	0	0	0	0	0	0	1

### Advertise Construction

Project Description	FY 22 Qtr 1		FY 22 Qtr 2		FY 22 Qtr 3		FY 22 Qtr 4		FY 22 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
SR-55, I-405 to I-5			X						
Total Forecast/Actual	0	0	1	0	0	0	0	0	1

### Award Contract

Project Description	FY 22 Qtr 1		FY 22 Qtr 2		FY 22 Qtr 3		FY 22 Qtr 4		FY 22 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
SR-55, I-405 to I-5							X		
Total Forecast/Actual	0	0	0	0	0	0	1	0	1

# Capital Programs Division

## Fiscal Year 2021-22 Performance Metrics Plan

### Complete Construction

Project Description	FY 22 Qtr 1		FY 22 Qtr 2		FY 22 Qtr 3		FY 22 Qtr 4		FY 22
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
No "Complete Construction" milestones scheduled for FY 2021-22									
Total Forecast/Actual	0	0	0	0	0	0	0	0	0

Totals	1	0	3	0	1	0	2	0	7
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SR-241 - Foothill/Eastern Transportation Corridor (State Route 241)

ADA - Americans with Disability Act

HOV - high-occupancy vehicle

X = milestone forecast in quarter

✔ = milestone accomplished in quarter

# Administrative Support for the Los Angeles – San Diego – San Luis Obispo Rail Corridor Agency

Executive Committee  
August 2, 2021



# History

- LOSSAN Rail Corridor Agency has been in existence since 1989
  - Multi-county joint powers authority
  - Responsible for planning and coordinating passenger rail service between Los Angeles and San Diego
- Reformed in 2012 – SB 1225 (Chapter 802, Statutes of 2012)
  - Local control: Transferred the day-to-day management of the Amtrak Pacific Surfliner service from the California Department of Transportation to the LOSSAN Rail Corridor Agency
  - Goal: Increase ridership, revenue, reliability, and safety
  - Funding: Service remains fully funded by farebox and state

# Managing Agency

- August 2013 the Orange County Transportation Authority (OCTA) was selected as the managing agency through a competitive process
  - Facilitated through an administrative support agreement
- OCTA provides all necessary administrative support services (human resources, contracts and materials management, clerk of the board, general services, etc.)
- OCTA is reimbursed with state funding through the LOSSAN Rail Corridor Agency

# Accomplishments

- Ensured year-over-year ridership and farebox recovery increases (prior to the coronavirus pandemic)
- Implemented two additional round trips
- Introduced expanded business class service, increasing revenue
- Revamped café car leading to increased revenue
- Enhanced Rail 2 Rail program and initiated transit transfer program leading to increased ridership, improved passenger experience, and better corridor connectivity
- Secured over \$379 million in grant funds

# Benefits

- Improved coordination between three passenger rail services currently operating on the LOSSAN rail corridor
- Local control has enabled more responsive service planning and delivery, leading to increases in ridership and removing cars from roadways and freeways
- Improved ridership and revenue resulting in better utilization of available funding and ability to run additional service