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MEETING OF THE

**REGIONAL TRANSIT
TECHNICAL ADVISORY
COMMITTEE**

**Monday, April 30, 2018
10:00 a.m. – 12:00 p.m.**

SCAG LOS ANGELES MAIN OFFICE

**900 WILSHIRE BLVD., STE. 1700
POLICY COMMITTEE ROOM A
LOS ANGELES, CALIFORNIA 90017
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PLEASE NOTE NEW LOCATION

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Matt Gleason at (213) 236-1832 or email gleason@scag.ca.gov

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. SCAG is also committed to helping people with limited proficiency in the English language access the agency's essential public information and services. You can request such assistance by calling (213) 236-1908. We request at least 72 hours (three days) notice to provide reasonable accommodations and will make every effort to arrange for assistance as soon as possible.

**REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE
AGENDA
Monday, April 30, 2018**

The Regional Transit Technical Advisory Committee may consider and act upon TIME PG# any of the items listed on the agenda regardless of whether they are listed as information or action items.

1.0 CALL TO ORDER

(Gary Hewitt, OCTA, Regional Transit TAC Chair)

2.0 PUBLIC COMMENT PERIOD - Members of the public desiring to speak on items on the agenda, or items not on the agenda, but within the purview of the Regional Transit Technical Advisory Committee, must fill out and present a speaker's card to the assistant prior to speaking. Comments will be limited to three minutes. The chair may limit the total time for all comments to twenty (20) minutes.

3.0 RECEIVE AND FILE

3.1	<u>Minutes of the January 31, 2018 Regional Transit TAC Meeting</u>	1	3
3.2	<u>Transit Ridership Update</u>		7
3.3	<u>RTTAC 2018 Agenda Look Ahead</u>		11

**REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE
AGENDA
Monday, April 30, 2018**

4.0 INFORMATION ITEMS

4.1	<u>Innovative Clean Transit Regulation</u> <i>(Dr. Yachun Chow, California Air Resources Board)</i>	25	*
4.2	<u>Transit Climate Adaptation and Resiliency Effort</u> <i>(Beth Rodehorst, ICF International)</i>	35	13
4.3	<u>Proposed Microtransit Pilot</u> <i>(Nora Chin, LADOT)</i>	15	42
4.4	<u>2020 RTP/SCS Goals and Objectives</u> <i>(Courtney Aguirre, SCAG)</i>	15	60

5.0 STAFF REPORT

5.1	<u>Draft 2020 RTP/SCS HQTC and Major Transit Stop Methodology</u> <i>(Steve Fox, SCAG)</i>	5	-
5.2	<u>ADA Forecast Procurement</u> <i>(Matt Gleason, SCAG)</i>	2	-
5.3	<u>SB-1 Recall Effort</u> <i>(Kevin Gilhooley, SCAG)</i>	5	-
5.4	<u>SCAG FTIP Public Participation Process and Compliance With Section 5307 Program Requirements</u> <i>(Philip Law, SCAG)</i>	2	75

6.0 ADJOURNMENT

The next Regional Transit Technical Advisory Committee meeting is tentatively scheduled for Wednesday, August 29, 2018.

* Attachment under separate cover

1.0 CALL TO ORDER

Gary Hewitt, OCTA, called the meeting to order at 10:07 a.m.

2.0 PUBLIC COMMENT PERIOD

No members of the public requested to comment.

3.0 RECEIVE AND FILE

3.1 Minutes of the January 31, 2018 Regional Transit TAC Meeting

4.0 INFORMATION ITEMS

4.1 Metro Ridership Growth Action Plan

Conan Cheung, LACMTA, reported on Metro's Ridership Growth Action Plan. Mr. Cheung stated initial efforts in developing a ridership growth plan include examining recent demographic changes which show household growth in downtown Los Angeles and areas northeast of it. He reviewed changes in household income noting a decline in middle class income and an increase in high income population in areas. Additionally, there is a population increase of those 55 years and older. Employment density shows greater concentrations in downtown Los Angeles, midcity and West Los Angeles. Mr. Cheung reviewed travel patterns in these areas.

Next, current service routes were examined showing areas where demand is great and those that may offer opportunities to expand service. Mr. Cheung reported on the growth of other mobility options available in the service area such as Uber. He noted that Metro's Office of Extraordinary Innovation is exploring micro transit service and other options to respond to contemporary mobility trends. Mr. Cheung noted next steps include additional survey and focus group research as well as peer agency interviews. He noted market research will examine market segments and focus on population segments that may be on the cusp of using transit and those who may be considering leaving transit.

Philip Law, SCAG staff, asked if any efforts are underway to explore ridership declines on rail lines. Mr. Cheung reviewed efforts for specific rail lines noting that speed and reducing delays will be important to drawing and retaining riders.

4.2 Metro NextGen Bus Study

Stephen Tu, LACMTA, reported on Metro's NextGen Bus Study. Mr. Tu stated the study will explore ways to improve service to current riders as well as attract new riders and investigate potential new markets. He reviewed the project's guiding principles and internal and external stakeholder groups noting that public input and buy-in is critical to the project's success. Mr. Tu reviewed the study phases including understanding important travel attributes of current and potential riders, establishing service concepts and strategies as well as investigating opportunities to

restructure routes, schedules and services to current, potential and future riders. Mr. Tu noted next steps include completing market segmentation as well as establish project committees and public engagement.

4.3 OCTA Transit Strategic Plan

Gary Hewitt, OCTA, provided an update on OCTA's Transit Strategic Plan. Mr. Hewitt stated the plan is a strategic framework for the most appropriate capital investments and examines service corridors of opportunity for both rail and bus. He reviewed the corridors under consideration, survey results and which transit services ranked highest among respondents. He noted additional Metrolink service ranked highly as well as increased express and special event service. Mr. Hewitt reviewed the short-term action plan to be implemented in the next 5 years including two micro transit pilot projects and continued corridors studies for possible future investment. Mid and Long-term investment opportunities were reviewed.

Mr. Hewitt stated recommendations will be forwarded to their Board for feedback and final recommendations will be communicated to the public and stakeholders.

Philip Law, SCAG staff, asked when it will be known which of the mid and long-term recommendations will be placed into the Long Range Transportation Plan. Mr. Hewitt responded that a mix of projects are under consideration and final determination may be affected by available funding.

4.4 Draft 2020 RTP/SCS HQTC and Major Transit Stop Methodology

Steve Fox, SCAG staff, provided an update on Draft 2020 RTP/SCS High Quality Transit Corridor and Major Transit Stop Methodology. Mr. Fox stated that SCAG is currently updating its list of major transit stops in preparation for the 2020 Regional Transportation Plan/Sustainable Communities Strategy. He noted the RTTAC as well as other major metropolitan planning organizations were involved in the development of the methodology. Mr. Fox reviewed the 2016 methodology and the refinements for the 2020 RTP/SCS. He noted that next steps include incorporating additional input from the RTTAC, consulting with other MPOs, the Office of Planning and Research then to return to the RTTAC with a final methodology.

Scott Paige, LACMTA, asked about the methodology noting that some bus service lines are frequent but fail to qualify according to the statute. Philip Law, SCAG staff, reviewed the qualifying elements under both SB 375 and SB 743. Mr. Law indicated that feedback will be summarized and encouraged members to forward other comments.

5.0 STAFF REPORT

Philip Law, SCAG staff, stated that SCAG is continuing its effort to update metropolitan planning agreements for each county noting that Imperial and Riverside counties have given their approval. Additionally, the SCAG/UCLA

Falling Transit Ridership Report is released to the public today and the next transit resiliency workshop will be held February 12, 2018 at SCAG's San Bernardino office and the final one will be February 13, 2018 at SCAG's downtown Los Angeles office.

6.0 ADJOURNMENT

Gary Hewitt, OCTA, adjourned the meeting at 12:07 p.m.

Southern California Association of Governments
900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017

Agenda Item No. 3.2
April 30, 2018

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Philip Law, Transit/Rail Manager, 213-236-1841,
law@scag.ca.gov

Subject: Transit Ridership Update

DISCUSSION:

As part of the continuing discussion of transit ridership trends at the RTTAC, SCAG staff has prepared information using the latest available data for 2017 from the National Transit Database (NTD). The NTD data used for this report are the unlinked passenger trips (UPT) reported in the December 2017 Adjusted Database available at <https://www.transit.dot.gov/ntd/data-product/monthly-module-adjusted-data-release>. Note that this monthly data is “unaudited” and there may be discrepancies with the 2017 annual numbers, which are not expected to be released until fall 2018.

The data summarized in this report suggest that bus ridership continued to decline in 2017 for all of the largest transit providers in the region except one (see Table 1). Total regional bus ridership experienced a fifth consecutive year of decline in 2017, down by 6.8% from 2016 levels (see Figure 1). The rate of decline appears to be slowing, however, compared to the previous year.

Rail ridership performance was flat overall from 2016 to 2017, with Metro heavy rail (Red Line) ridership down by 1.7% in 2017 compared to 2016, and Metrolink commuter rail ridership down by 12.2% (see Table 2). Metro light rail ridership growth offset these losses, as it increased by 3.3% in 2017 (slower than the 8.4% rate in 2016) due to continued Expo Line growth. Notably, Expo Line ridership surpassed that of the Gold Line for the first time (see Metro line data shown in Figure 2).

Operators in the rest of California also continued to see bus ridership declines in 2017 (see Table 3). In San Diego, bus ridership decreased by 4.6% from 2016 levels, while in Sacramento it declined by 8.8%. In the Bay Area, San Francisco Muni saw bus ridership fall by 2.3%, while Alameda-Contra Costa Transit was down 1.2% and Santa Clara Valley Transportation Authority (San Jose) was down 6.5%. In terms of rail (see Table 4), light rail ridership in San Francisco was up by 2.6% in 2017 compared to 2016. Bay Area overall commuter rail ridership was mixed, with Altamont Corridor Express continuing to see increases, while Caltrain lost 8.2% of its ridership. The Bay Area Rapid Transit (BART) continued its decline with a drop of 4.4%. Light rail ridership fell by 12.6% in San Jose and by 4.7% in Sacramento, an acceleration of decline in both regions. In San Diego, ridership on the Sprinter and Coaster systems decreased by 5.2% and 1.2%, respectively.

Table 1. Change in Unlinked Passenger Trips (UPT) – SCAG Region (Bus)

BUS OPERATOR/SYSTEM	TOTAL UPT (000s)		YEAR-TO-YEAR CHANGE				
	2016	2017	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Anaheim Transp. Network	9,559	8,780	-8.2%	-2.3%	1.2%	-11.8%	-16.7%
Antelope Valley Transit Authority	2,815	2,501	-11.1%	-9.7%	-10.7%	-13.4%	-10.8%
Beach Cities Transit	376	370	-1.7%	-7.6%	0.9%	0.0%	0.6%
City of Los Angeles (LADOT)	20,549	17,471	-15.0%	-13.4%	-7.1%	-21.2%	-18.6%
Culver CityBus	5,338	4,912	-8.0%	-11.4%	-8.1%	-5.7%	-6.5%
Foothill Transit	13,585	12,888	-5.1%	-2.7%	2.1%	-12.2%	-7.0%
Gold Coast Transit	3,701	3,525	-4.8%	-6.0%	-3.1%	-5.0%	-4.9%
GTrans (City of Gardena)	3,284	3,072	-6.4%	-14.4%	-10.0%	-2.0%	2.3%
Imperial Valley Transit	797	775	-2.7%	-1.7%	-5.2%	-2.5%	-1.5%
Laguna Beach Transit	1,015	844	-16.8%	-32.0%	-38.3%	-9.2%	2.3%
Long Beach Transit	25,811	24,307	-5.8%	-2.7%	-6.1%	-9.8%	-5.1%
Metro	304,250	284,666	-6.4%	-11.2%	-7.1%	-5.0%	-2.1%
Montebello Bus Lines	6,681	5,823	-12.8%	-16.6%	-13.3%	-13.8%	-7.3%
Norwalk Transit System	1,466	1,492	1.7%	10.1%	11.8%	-8.8%	-3.2%
Omnitrans	11,621	11,032	-5.1%	-9.1%	-4.4%	-4.7%	-1.8%
Orange County Transp. Authority	41,202	39,507	-4.1%	-9.0%	-3.0%	-3.7%	-0.6%
Riverside Transit Agency	8,513	8,150	-4.3%	-6.4%	-2.8%	-6.4%	-1.5%
Santa Clarita Transit	2,916	2,711	-7.0%	-11.8%	-8.6%	-8.2%	1.0%
Santa Monica's Big Blue Bus	15,198	13,266	-12.7%	-24.6%	-19.8%	-2.9%	1.0%
SunLine Transit	4,242	4,047	-4.6%	-2.7%	-5.7%	-6.0%	-4.2%
Torrance Transit Agency	3,791	3,471	-8.4%	-3.3%	8.0%	-20.2%	-15.8%
Ventura Intercity Service Transit Auth.	840	753	-10.3%	-10.3%	-10.4%	-12.5%	-8.0%
Victor Valley Transit Authority	1,849	1,617	-12.6%	-10.4%	-13.5%	-11.0%	-15.4%

Table 2. Change in Unlinked Passenger Trips (UPT) – SCAG Region (Rail)

RAIL OPERATOR/SYSTEM	TOTAL UPT (000s)		YEAR-TO-YEAR CHANGE				
	2016	2017	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Metro (heavy rail)	45,629	44,861	-1.7%	-1.0%	1.1%	-4.0%	-2.7%
Metro (light rail)	65,727	67,922	3.3%	11.5%	1.8%	0.0%	0.9%
Metrolink (commuter rail)	12,113	10,635	-12.2%	-21.4%	-19.3%	-2.5%	-1.2%

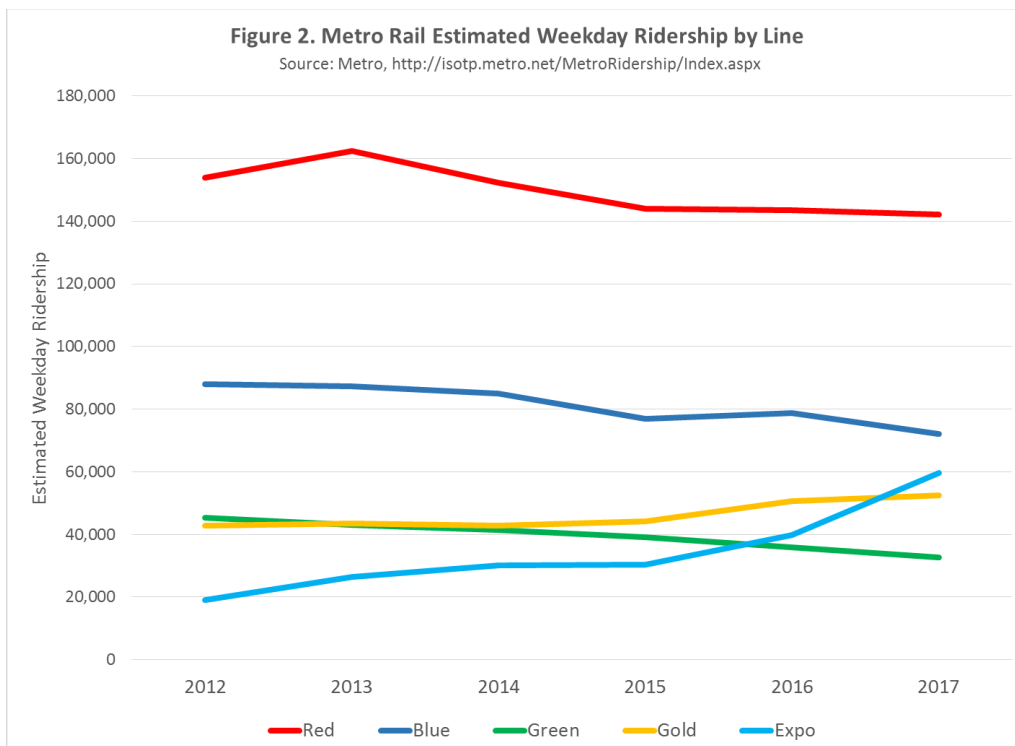
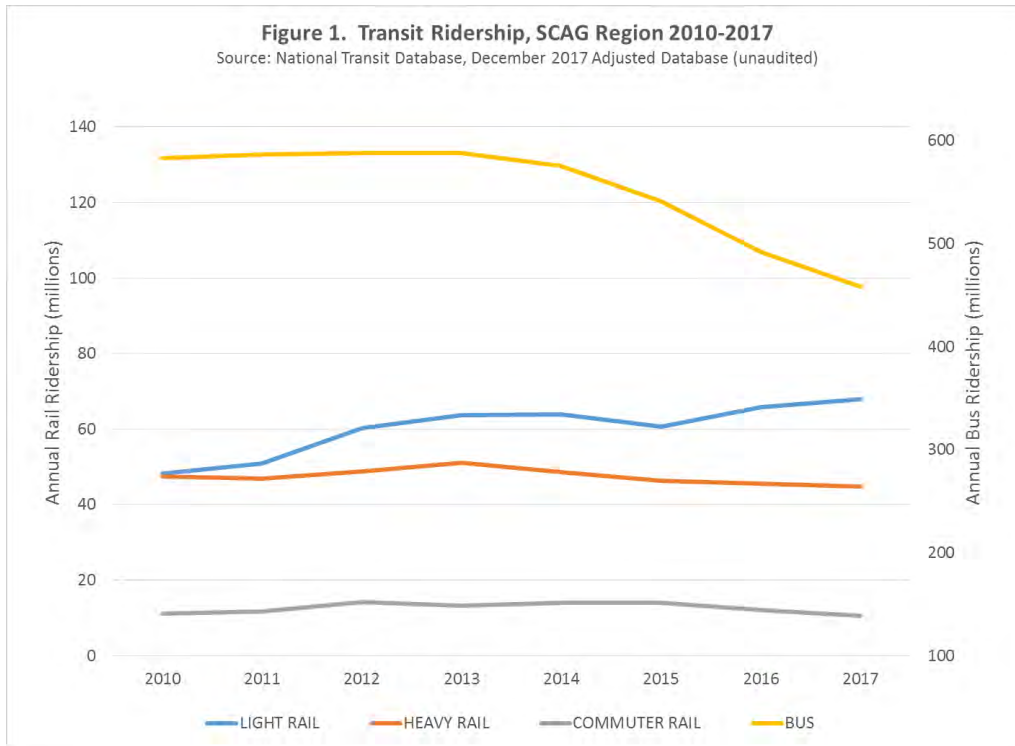


Table 3. Change in Unlinked Passenger Trips (UPT) – Other California (Bus)

BUS OPERATOR/SYSTEM	Total UPT (000s)		Year-to-Year Change				
	2016	2017	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Alameda-Contra Costa Transit	53,203	52,571	-1.2%	-0.9%	-2.9%	-1.4%	0.5%
North County Transit District	7,144	6,529	-8.6%	-12.8%	-9.0%	-8.4%	-3.8%
Sacramento Regional Transit	11,265	10,272	-8.8%	-10.0%	-13.0%	-5.2%	-6.7%
San Diego Metropol. Transit System	50,737	48,694	-4.0%	-6.0%	-0.4%	-5.8%	-3.9%
San Francisco Muni*	164,876	161,092	-2.3%	-7.3%	-1.8%	-1.2%	1.2%
Santa Clara Valley Transp. Authority	30,834	28,831	-6.5%	-10.9%	-6.6%	-4.9%	-3.4%

*Includes trolley bus

Table 4. Change in Unlinked Passenger Trips (UPT) – Other California (Rail)

RAIL OPERATOR/SYSTEM	Total UPT (000s)		Year-to-Year Change				
	2016	2017	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Altamont Corridor Express	1,295	1,328	2.6%	-2.8%	4.1%	1.7%	7.2%
Bay Area Rapid Transit	135,238	129,268	-4.4%	-5.7%	-4.4%	-3.9%	-3.7%
Caltrain	18,495	16,981	-8.2%	-16.2%	1.6%	-10.8%	-7.6%
North Co. Transit District (Coaster)	1,504	1,426	-5.2%	-6.3%	-6.8%	-4.8%	-2.4%
North Co. Transit District (Sprinter)	2,601	2,571	-1.2%	-6.2%	-1.6%	1.6%	1.7%
Sacramento Regional Transit	11,805	11,253	-4.7%	-7.9%	-3.9%	2.4%	-8.7%
San Diego Metropol. Transit System	38,169	37,673	-1.3%	-6.9%	1.4%	-1.8%	2.3%
San Francisco Muni (light rail)	49,490	50,776	2.6%	6.9%	5.7%	-3.0%	1.3%
San Francisco Muni (streetcar)	7,208	7,794	8.1%	9.0%	6.7%	8.6%	8.3%
Santa Clara Valley Transp. Authority	9,927	8,675	-12.6%	-15.4%	-15.7%	-11.9%	-6.9%

RTTAC 2018 Agenda Look Ahead

The RTTAC meets quarterly on the fifth Wednesday of the month. Following is a tentative look-ahead to the proposed RTTAC agendas for 2018. It includes three standing items requested by the Chair and Vice Chair for:

- 1) Regulatory Compliance – items addressing compliance with MAP - 21 and FAST Act rulemakings, as well as state regulations including SB 375 or ARB fleet rules
- 2) Performance – items related to understanding why ridership has declined, and highlighting steps local agencies are taking to address these losses
- 3) Technology and Mobility Innovations – items related to transportation network companies, ITS, advanced technologies, and other mobility innovations

The discussion items below are proposed and speakers have not yet been contacted. Suggestions from RTTAC members are welcome.

August 29, 2018

- Regulatory Compliance Standing Item
 - ARB SB375 GHG Emissions Reduction Targets Update
- Performance Standing Item
 - 2020 RTP/SCS Base Year System Performance
- Technology and Mobility Innovations Standing Item
 - Monrovia Lyft and Limebike Partnerships*
 - SCAG ITS Architecture Update (Receive and File)
 - OC Flex Pilot
- 2020 RTP/SCS Trends and Challenges
- 2018 Election Legislative Update
- FY2017-18 Caltrans 5304 Program Completed Work (Receive and File)
- HQTC/Major Transit Stop Methodology

October 31, 2018

- Regulatory Compliance Standing Item
 - Transit Asset Management (SCAG work effort)
 - Private Sector Providers of Transportation Services
- Performance Standing Item
 - Rand Corporation Future of Mobility Report*
- Technology and Mobility Innovations Standing Item
 - Impact of Emerging Technologies Methodology for Public Transportation
 - SCAG ITS Architecture Update: Findings from Private Sector Outreach
- 2020 RTP/SCS Scenario Planning Development
- HQTC/A Future Corridor Development

January 30, 2019

- Regulatory Compliance Standing Item
 - Transit Asset Management (SCAG work effort)
 - Regional Housing Needs Assessment/Growth Forecast
- Performance Standing Item
 - 2020 RTP/SCS Goals and Performance Measures (Impact of Map 21 Final Rules)
- Technology and Mobility Innovations Standing Item
 - Montebello Bus Lines On Board Video Detection System*
 - LA Metro Pilots/Office of Extraordinary Innovations*

Southern California Association of Governments
900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017

Agenda Item No: 4.2
April 30, 2018

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Matt Gleason, Senior Regional Planner, 213-236-1832,
gleason@scag.ca.gov

Subject: Transit Climate Adaptation and Resiliency Effort

OVERVIEW:

SCAG was awarded a grant to perform Transit Climate Adaptation and Resilience effort in FY 2015-16. After some initial delays, work has progressed over the past ten months. This study was previously presented to the RTTAC in May and November of 2017. The consultant team will present their findings, and provide an overview of draft climate adaptation tools that have been developed.

TRANSIT CLIMATE ADAPTATION AND RESILIENCY EFFORT:

The Transit Climate Adaptation and Resiliency effort has sought to evaluate the potential effects of changes in climate stressors, and developed resources to aid local agency staff in incorporating climate change adaptation strategies into their planning processes, to ensure system resiliency. The study team has developed a toolbox of resources, provided an asset class based inventory of regional transit assets, sought out regional climate forecast information, and performed a high level assessment vulnerability to and risk from climate stressors,.

OUTREACH:

Local agency input has been key to this effort. This study was previously presented to the RTTAC in both May and November of 2017.

In addition, there were three outreach workshops with invited staff from participating transit provider agencies. The first workshop will focus on vulnerability and criticality, and was jointly conducted in Los Angeles and San Bernardino Counties via videoconference. The consultant team shared climate forecast information and exposure maps, illustrated how routes might be exposed to key stressors, and provided guidance for obtaining climate information in a cost effective manner.

The second two workshops were conducted independently in Los Angeles and San Bernardino Counties, and focused on potential adaptation strategies, evaluating their feasibility and effectiveness, and developing a framework for incorporating these strategies into normal agency processes, including planning, procurement, and asset management.

NEXT STEPS:

The project team has prepared a series of draft resources, and are seeking review and comment from the members of the RTTAC. The project team will be forwarding the draft resources to the member list by May 1, 2018, and hopes to receive comments by May 8.

Attachment A: Power Point Presentation

SCAG Transit Climate Adaptation and Resiliency Assessment Project

Regional Transit Technical Advisory
Committee (RTTAC) Meeting

April 30, 2018



Presented by ICF



Agenda

- Project overview and purpose
- Introduction to Climate Resilience Toolbox
- Detailed look at 10 draft toolbox resources
- Next steps



Project Overview and Purpose

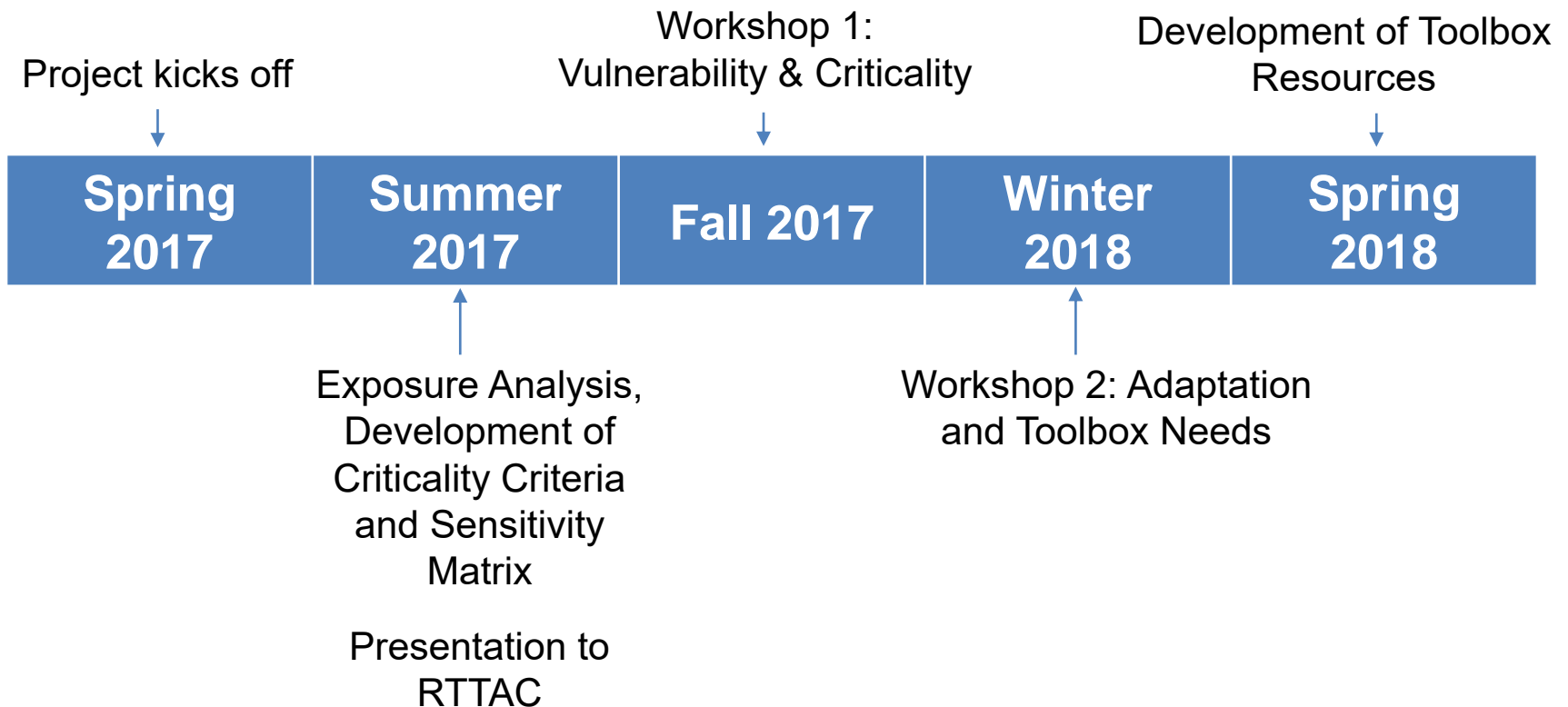




Project Purpose

- Empower transit agencies in the SCAG Region to:
 - identify critical assets and routes;
 - integrate climate considerations into local and regional planning processes; and
 - implement adaptation practices to improve transit system resilience while complying with state and federal regulations.
- Develop a toolbox of resources that will assist transit agencies in completing these activities with limited resources
- **Project to be completed in June 2018**

Key Project Milestones



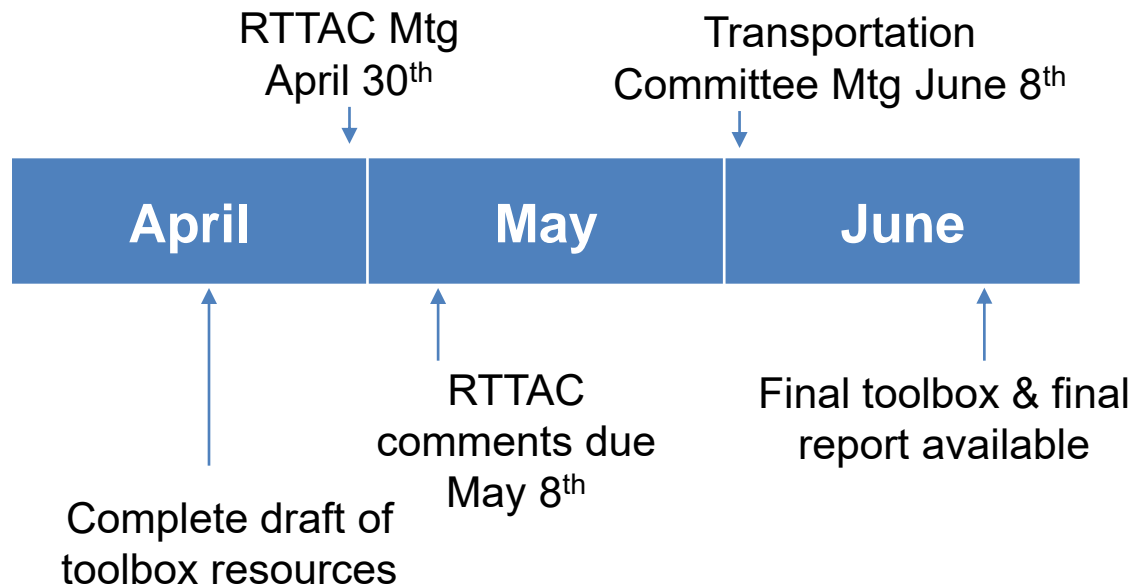
Workshop 1: SCAG HQ



Workshop 2: San Bernardino



Project Next Steps





Purpose of Today's Presentation

- Introduce toolbox resources to RTTAC members
- Request your feedback on the draft resources by May 8th
- Based on your comments, we will revise the resources throughout May and early June



Introduction to Climate Resilience Toolbox



Why a Toolbox?

- Purpose is to build capacity of transit agencies of all sizes to
 - Evaluate their own vulnerabilities to climate change
 - Identify and implement appropriate adaptation measures
- By lowering common barriers to climate resiliency planning, agencies with limited resources can prepare for climate change

Summary of Toolbox Resources

#	Resource	Purpose
1	Guidance on evaluating vulnerability/consequences	<p style="text-align: center;">Getting Started</p> <ul style="list-style-type: none"> • Articulating goals and objectives for climate resiliency initiatives • Understanding how climate may change in your area • Identifying transit decision-making processes that may facilitate climate resiliency
2	Guide to obtaining climate data and summary of projected climate changes in SCAG region	
3	Guide to integrating climate resilience into common transit decision-making processes	
4	Criticality criteria	<p style="text-align: center;">Assessing and Addressing Vulnerability and Consequences</p> <ul style="list-style-type: none"> • Identifying which assets are most critical • Understanding the sensitivity of your transit system to climate changes • Understanding what other transit agencies are doing to adapt • Learning key tips when evaluating and selecting adaptation strategies
5	Transit sensitivity matrix	
6	Example transit adaptation strategies	
7	Guidance on evaluating adaptation strategies	
8	Template for timeline, staff roles, next steps	<p style="text-align: center;">Moving Toward Implementation</p> <ul style="list-style-type: none"> • Articulating key next steps, staff responsible for them, and overall timelines and milestones for the resiliency initiative • Completion of contingency planning template • Identifying possible opportunities for funding
9	Contingency planning template	
10	Funding opportunities summary	

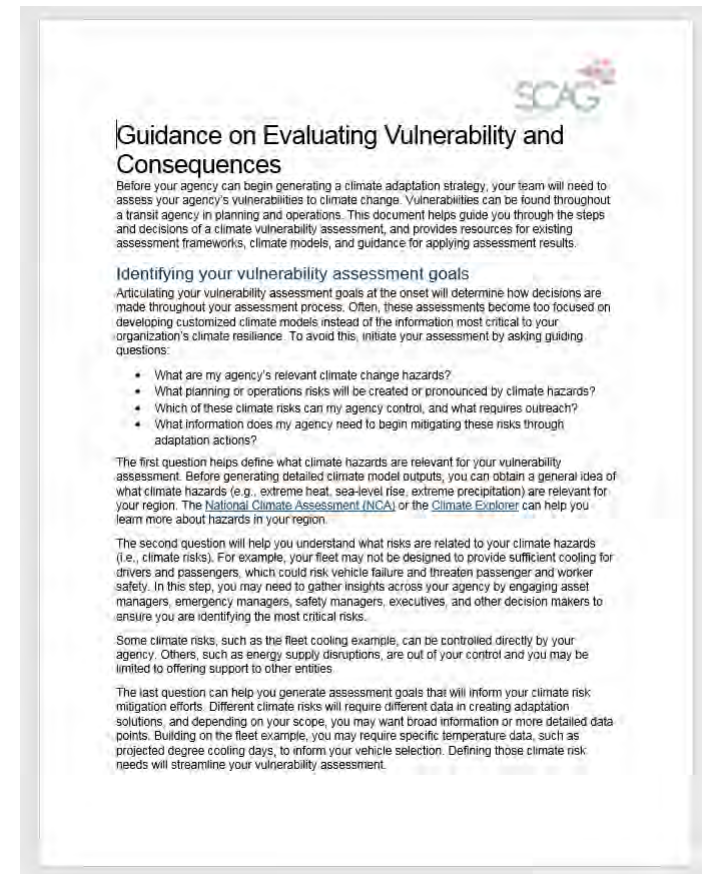


Proposed SCAG Adaptation Toolbox Components



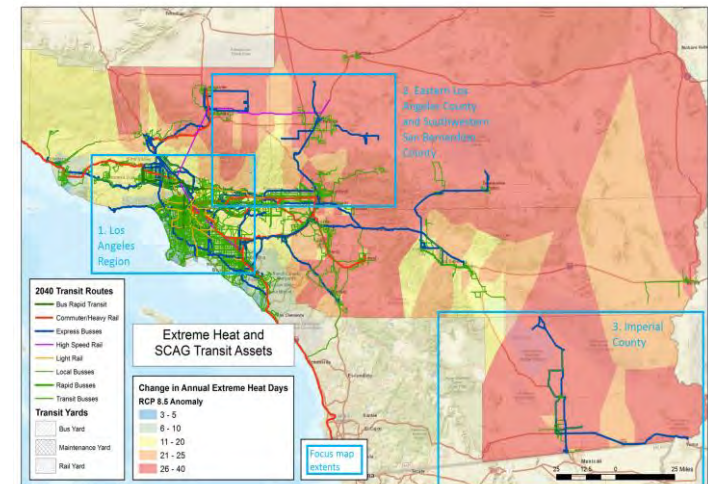
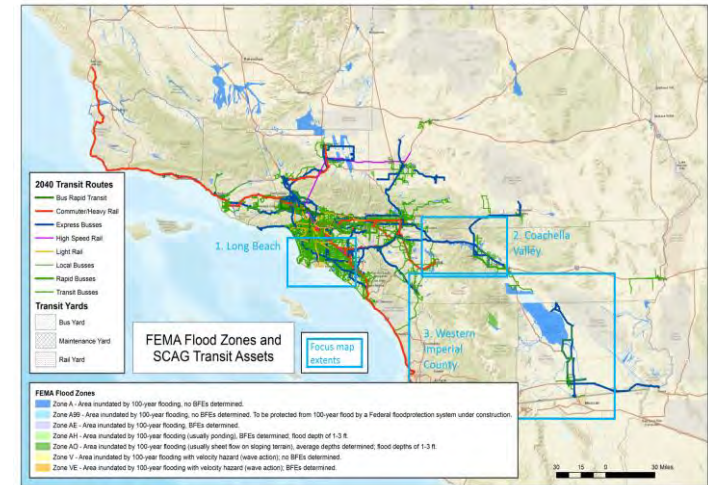
1. Guidance on Evaluating Vulnerability & Consequences

- **Purpose:** Help users get started on a vulnerability assessment
- **Key Features**
 - Discusses the importance of articulating goals of vulnerability assessment early on
 - the goals will drive certain decisions of the vulnerability assessment process
 - Summarizes available vulnerability assessment frameworks and related resources available
 - Does not re-invent the wheel!



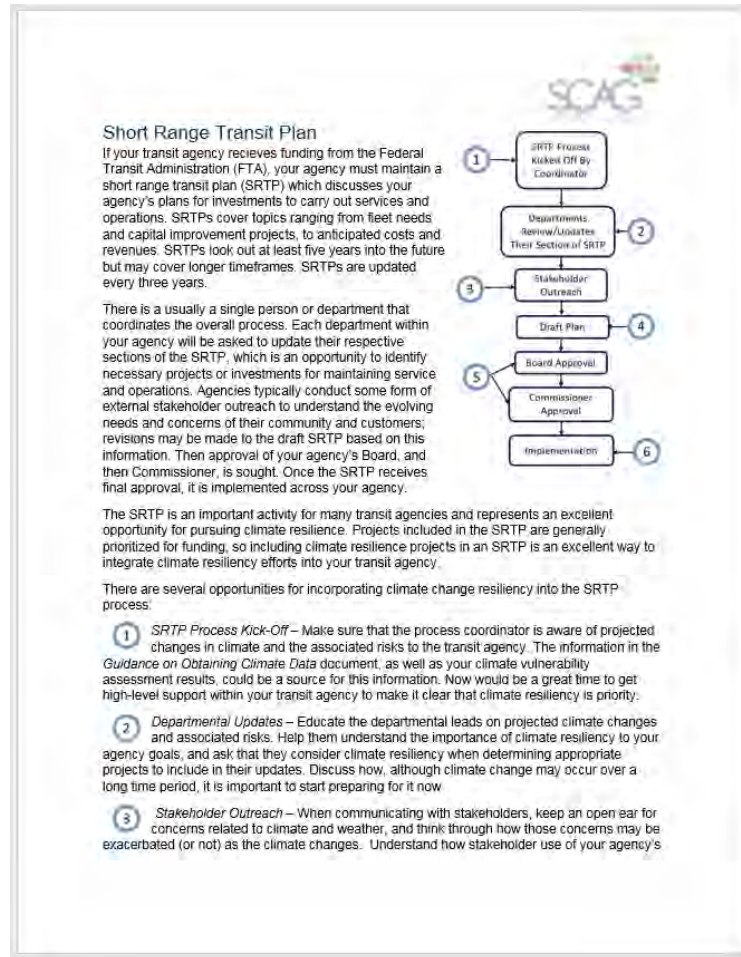
2. Guide to Climate Projection Data

- **Purpose:**
 - Orient users with projected changes in climate
 - Provide guidance on obtaining more detailed climate projection data if needed
- **Key Features**
 - Maps and summaries of projected changes in SCAG region for heat, precipitation, sea level rise, flooding
 - Summary of recommended sources of more detailed climate projection data
 - Step-by-step guide to determining data needs, obtaining it, and understanding the uncertainty of the data



3. Integrating Climate Resilience to Existing Decision-Making Processes

- **Purpose:** Help users integrate climate resiliency into existing processes at their transit agency
- **Key Features**
 - Maps out basic steps of 3 common decision making processes:
 - Procurement/Contracting
 - Transit Asset Management (TAM)
 - Short Range Transit Plan (S RTP)
 - Identifies ways to integrate climate resiliency into those steps



Why Look at Existing Processes?

- Adaptation is often most successful when *integrating* it into existing decision-making processes, rather than trying to build an entirely new process around climate change adaptation
- Transit agencies already deal with weather-related stressors. Climate change adds a new twist to this sort of risk, which is already being addressed by existing risk management processes
- Therefore, it's easier to adjust existing processes than create entirely new ones

4. Criticality Criteria

- **Purpose:** Assist transit agencies in identifying most critical assets in order to better understand system vulnerabilities
- **Key Features:**
 - Document introducing concept of criticality and its role in understanding vulnerability to climate change
 - Excel-based scoring tool to help transit agencies identify their most critical assets

	A	B	C	D	E	F	G	H	I
1									Asset Evaluation Criteria
2	Bus Asset Category	Severity	Ridership	Connectivity	Service Criticality Score	Total Criticality Score			Severity: Given an available backup (if applicable), what kind of service can the system provide?
3	Administration				0	0		0	Near normal service
4	Bases				0	0		2	Impaired/compromised delivery of service
5	Communications				0	0		4	Localized shutdown
6	Financial (payroll, procurement, revenue)				0	0		15	Total system shutdown (automatically considered to be highly critical)
7	Fleet (non-revenue)				0	0			Ridership: How many riders does the asset serve each day?
8	Fleet (revenue)				0	0		0	Does not apply
9	Fuel infrastructure & operations				0	0		1	<100 riders
10	Information technology				0	0		2	100 - 999 riders
11	Material (stockroom)				0	0		3	1,000 - 9,999 riders
12	Route (redundancy)				0	0		4	≥10,000 riders
13	Staff (contracted)				0	0			Connectivity: How many transit lines does the asset provide connections to?
14	Staff (direct operators)				0	0		0	Does not apply
15	Station/bus stop				0	0		1	<5 lines
16	Transit centers (incl. park & ride lots, bike centers, etc.)				0	0		2	5 - 9 lines
17	Yards & shops				0	0		3	≥10 lines
18								30	Highest Possible Asset Criticality Score (Service Evaluation Criteria + Asset Evaluation Criteria)
19	Rail Asset Category	Severity	Ridership	Connectivity	Service Criticality	Total Criticality			
20	Administration				0	0			
21	buildings				0	0			
22	Bases				0	0			
23	Communications				0	0			
24	Crossing gates				0	0			
25	Electric grid				0	0			
26	Financial (payroll, procurement, revenue)				0	0			
27	Fleet (non-revenue)				0	0			
28	Fleet (revenue)				0	0			
29	Fuel infrastructure & operations				0	0			
30	Information technology				0	0			
31	Material (stockroom)				0	0			
32	Signals & equipment				0	0			
33	Staff (contracted)				0	0			
34	Staff (direct operators)				0	0			
35	Stations				0	0			
36	Tracks, tunnels, transit centers (incl. park & ride lots, bike centers, etc.)				0	0			
37					0	0			

5. Transit Sensitivity Matrix

- **Purpose:** Assist transit agencies in understanding the ways that projected changes in climate may affect them
- **Key Features:**
 - Excel-base matrix with research-backed descriptions of how different types of assets are affected by different climate stressors

Buses			
Asset Category	Climate Stressors		
	Temperature	Precipitation and Inland Flooding	Sea Level Rise
	Important Impact-Asset Relationships	Important Impact-Asset Relationships	Important Impact-Asset Relationships
Fleet	<ul style="list-style-type: none"> • Reduce asset lifespan (3, 8). • At higher temperatures, buses break down more frequently and require additional maintenance (8). Once temperatures reach 120 degrees F, many buses begin to shut down and stop running (8). • Extreme temperatures, particularly exceeding 100 degrees F stress the air conditioning systems (6). If they fail, the buses will be taken out of service and require maintenance (6). • Extreme heat stresses and causes damage to tires. The expansion and contraction of air in tires due to changing temperatures weaken the material (7). Increased cost of replacing tires damaged by more potholes and road damage (7). • Fueling in hot temperatures is less efficient, especially with gasoline (7). • Heat damage to asphalt could increase pothole and road damage, which can cause damage to buses (7). 	<ul style="list-style-type: none"> • Heavy precipitation floods buses. Water often intrudes because they tend to be low clearance (3, 8). • Precipitation and flooding deposits debris in buses and bus lots (3). • Flooded bus storage can damage the fleet (3). • Drought can increase the amount of dust on vehicles and increase the need for washing, while at the same time creating potential limits on water use (3). 	<ul style="list-style-type: none"> • Salty air and water are corrosive and cause damage to bus exteriors, which could be exacerbated by increased winds and storms (7).
Infrastructure (non-electrical)	<ul style="list-style-type: none"> • When high heat is accompanied by drought conditions, asphalt and concrete pavement can crack, making it more vulnerable to water damage when it does rain (4). • Periods of excessive heat can compromise pavement integrity (e.g., softening asphalt and increasing rutting from traffic) (5). May require buses to reroute or perform maintenance on concrete bus pads to protect pavement (8). 	<ul style="list-style-type: none"> • Flooding at bus stations, parking lots, and bus stops (3). • Facilities are lost for routine inspections, and require additional maintenance (2). • Low-lying bridge and tunnel entrances for roads, rail, and rail transit will be more susceptible to flooding, and thousands of culverts could be undersized for flows (5). • Flooding at waterway crossings (where water has velocity) can be expected to cause pavement and embankment failure beginning when the water is high enough to flow over the roadway surface (4). • Storms increase risk of debris accumulation, sedimentation, erosion, scour, piping, and conduit structural damage (4). • Depending on the soil type, drought can reduce soil moisture levels, impacting infrastructure, including pavements, road beds, and buried utilities (6) 	<ul style="list-style-type: none"> • Sea level rise increases the potential for flooding of the stormwater drainage system. Storm surge can flood the stormwater drainage system beyond its design capacity (4). • Depending on the location, the roads, bridges, and infrastructure could be vulnerable to intensified flooding, storm surge, and inundation due to sea level rise, etc. If exposed to storm surge, roads usually close or are rendered inoperable (4). • Facilities where maintenance occurs such as bus garages are vulnerable to sea level rise and storm surge (2). • Bus routes, particularly along the Pacific Coast Highway (PCH) and Belmont village, could be inundated (7). • Coastal flooding and extreme precipitation can cause back-up in waterways (7).
Infrastructure	<ul style="list-style-type: none"> • Increased frequency or duration of heat events or incremental increases in the mean temperature can cause increased demand for air conditioning and stress the electric power systems during heat events (4). If AC units fail, they must either be fixed and delay the schedule or drivers must operate in the heat (7). • Blackouts increase as individuals get home and increase electricity 	<ul style="list-style-type: none"> • Increased frequency or duration of heavy rain events will cause low sensitivity, soil moisture effects electrical power system components, such as poles supporting power lines (4). • Drought conditions can increase the likelihood that trees will snap and break in storms, damaging power lines (4). 	<ul style="list-style-type: none"> • Storm surge can damage essentially every component of electrical power systems (transmission lines, towers, insulators, generating plants) through direct flooding impacts, damage from debris, and other effects such as salt spray contamination (4). • Flooding can cause traffic lights to shut down or malfunction (4). During storms, utility connections and exposed cables usually fail

6. Example Adaptation Strategies

- **Purpose:** Provide examples of how other transit agencies are adapting to climate change. Inspire and provide ideas.
- **Key Features:**
 - Word document with discussion of 6 key types of adaptation strategies:
 - Plan & prepare, maintain & manage, strengthen & protect, enhance redundancy, recover, retreat
 - Real-life examples and case study summaries of adaptation measures within each of these categories
 - Excel version of examples table that can be filtered by type

SCAG

Example Adaptation Strategies Planned or Implemented by Transit Agencies

The following table describes adaptation strategies being undertaken by transit agencies. The strategy types are denoted by colored dots, each of which represents a different type of adaptation strategy, as shown below.

• Plan & Prepare • Maintain and Manage • Strengthen & Protect • Enhance Redundancy • Recover • Retreat

Transit Agency Adaptation Strategies	Adaptation Strategy Type	Source
Connecticut Department of Transportation <ul style="list-style-type: none">• Replacing a bridge that is critical to rail services in the Northeast Corridor and is vulnerable to storm surges	• Strengthen & Protect	2
Hillsborough Area Regional Transit Authority (HART) <ul style="list-style-type: none">• Driving resiliency through sustainability and environmental management system processes• Adopted infrastructure and practices to mitigate flooding, adopted operating procedures to manage temporary flooding, adopted an emergency operations plan to facilitate shut down and restoration in the event of a disaster	• Plan & Prepare • Maintain and Manage • Strengthen & Protect • Enhance Redundancy	1
Honolulu Department of Transportation Services (DTS) <ul style="list-style-type: none">• Pursuing resiliency through emergency preparedness, response, recovery, and risk mitigation• Mapped critical infrastructure and assets in terms of vulnerability to hurricanes and storm surge; implemented procedures to ensure assets are protected during severe weather events; updated infrastructure design standards to require use of resilient materials in rehabilitation, reconstruction, and new construction	• Plan & Prepare • Strengthen & Protect • Enhance Redundancy	1
Houston Metro <ul style="list-style-type: none">• Developing clear communications about service cut-off times prior to storms, and communicate these to stakeholders• Executing contracts so that during storms, the agency has access to catering and hotels for employees, access industrial equipment for cleaning bus routes, and that Houston Public	• Plan & Prepare • Strengthen & Protect • Enhance Redundancy • Recover	3

7. Tips for Evaluating & Implementing Adaptation Measures

- **Purpose:** Share quick tips for evaluating and implementing adaptation measures, gleaned from experiences across various transportation adaptation initiatives
- **Key Features:**
 - Word document with brief tips (generally 1 paragraph in length)
 - Touches on topics such as
 - Consideration of different types of cost (including costs of no-action)
 - Reminder that resilience can be achieved through different means—e.g. operational adjustments as well as physical protection/strengthening
 - Understanding the timing of adaptation—what needs to happen now, what can wait?
 - Putting uncertainty into context
 - Tip for effectively communicating the need for adaptation to help build internal and external support

8. Template for Timeline, Staff Roles, Next Steps

- **Purpose:** Help guide transit agencies in articulating clear next steps, and how/when those milestones will be achieved
- **Key Features:**
 - PPT template with sections on:
 - Goals and objectives
 - Immediate next steps, who is responsible for them, deadline
 - Overall timeline or key milestones for current resiliency planning effort

Climate Resilience Planning Template – Your Agency's Name
Use this template to articulate your goals, identify key next steps, and assign roles and responsibilities. Update this document frequently as you move through your resiliency planning process.

Resilience Goals & Objectives		Timeline and Key Milestones	
Near-Term Objectives		Longer-Term Goals	
1.		1.	
2.		2.	
3.			

Next adaptation planning check-in:

Adaptation Planning Timeline:

Immediate Next Steps	Assigned To	Deadline	Relevant Resilience Goal

9. Contingency Planning Template

- **Purpose:** Assist transit agencies in contingency planning in advance of a disruptive climate event
- **Key Features:**
 - Word template to be completed prior to events

CONTINGENCY PLAN TEMPLATE

Contingency Plan Implementation

[OPENING COMMENTS].

A contingency plan allows [AGENCY] to have a predictable and organized response to disruptions that may affect our service and operations. The plan would allow for us to do our best to continue to provide service to our customers, while adjusting service in response to the event.

This Contingency Plan outlines how the organization will function in the event [SPECIFIC EVENT *eg: a mudslide blocks a major corridor*] occurs. [ABOUT THE EVENT *eg: In Southern California, we are at risk of mudslides which are most common in...*].

To implement this contingency plan, circulate a draft to [AGENCY DEPARTMENTS AND STAKEHOLDERS], giving them [A PERIOD OF TIME] to make comments. Once the plan has been finalized, share the finished product with the organization, [CITY], [POLICE], [FIRE], [EMS], [CONTRACTORS]. All employees should be trained on the plan and emergency procedures. Contingency plan drills should be run periodically.

1) Problem identification + Immediate response

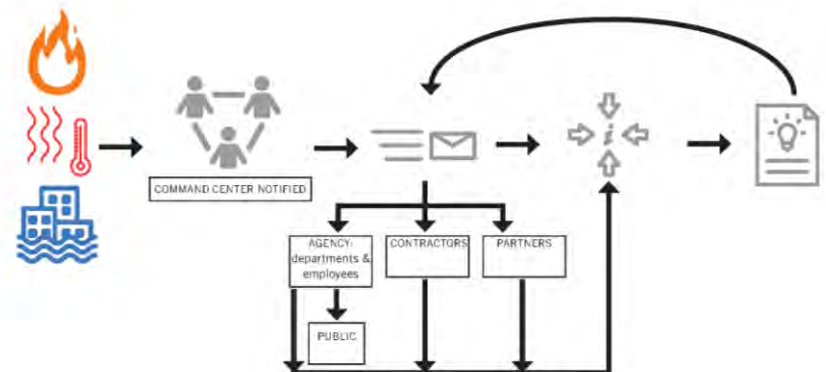
a) When [EVENT] occurs, the Employee or Emergency Crew witnessing the event should notify the [COMMAND CENTER] when it is safe to do so.

i) Employees should follow protocol in emergency situations. Contact 911 when necessary.

(1) In X situation, protocol is...[DESCRIPTION OF PROTOCOL]

ii) If a 911 call is made about the event, [ROLE] at the Emergency Dispatcher Office should inform the Incident Commander as well.

Flow of Information During A Disruptive Event



10. Summary of Funding Opportunities

- **Purpose:** Help transit agencies identify potential sources of funding for climate resiliency efforts
- **Key Features:**
 - 1-pager summarizing 7 grant programs from state and federal sources

Grant Type	Grant Source	Grant Program	Grant Description	Grant Distribution & Requirements
Planning	Caltrans Transportation Planning Grant Program	Adaptation Planning (FY 2018-19: \$7 Million)	Funding directed for climate change adaptation planning on California's transportation infrastructure to reduce impacts from climate change and extreme weather events.	Grant minimum of \$100,000 Grant maximum of \$1,000,000 11.47% local match minimum
		Sustainable Communities (FY 2018-19: \$29.5 Million)	Funds local and regional multimodal transportation and land use planning projects that further the region's RTP SCS, contribute to the State's GHG reduction targets, and assist in achieving Caltrans' overarching objectives (e.g. safety).	Grant minimum of \$50,000 for disadvantaged communities and \$100,000 for all others Grant maximum of \$1,000,000 11.47% local match minimum
Capital Project	CalSTA / Caltrans	CalSTA: Transit and Intercity Rail Capital Program (TIRCP) (FY 2018-19: \$483 Million)	Funds transformative capital improvement projects that modernize transit systems as well as reduce GHGs, increase transit ridership, integrate transit systems, and improve safety.	No specified maximum grant request or minimum match requirement, but funding leverage is desirable and will be considered in grant process
		Caltrans: State Transportation Improvement Program (STIP) (FY 2018-19: \$580 Million)	Funds state and regional transportation improvements, including highways, intercity rail, and other public transit projects.	75% of the funds are distributed to counties by formula 25% is distributed by the state for interregional needs
Federal	FEMA	Hazard Mitigation Grant Program (HMGP)	Funds efforts to reduce future losses only after a federally declared disaster. The application period closes 12-months after the date of declaration. Applicants apply as a sub-applicant under CalOES. Sub-applicants must have a FEMA approved & adopted Local Hazard Mitigation Plan	Grant covers 20% of total value of eligible damages, capped at: \$3 million maximum for implementation projects \$250,000 for multi-jurisdiction plans or \$150,000 for single-jurisdiction plans
	FTA	Public Transportation Emergency Relief Program	Funds for transit agencies only after a federally declared disaster for capital projects that protect, repair and replace damaged equipment and facilities or those at risk of being damaged. Also funds operating costs resulting from an emergency such as natural disasters.	To-date has only funded Hurricane Sandy-related expenses In affected areas, funded \$10.9 billion total, dispersed in increments from 2013-16 over 13 states
		Climate Change Adaptation Pilot Program	Funds awarded to pilot project to conduct climate change adaptation assessments focusing on adapting transit systems to climate change impacts. This program is not currently funded.	In 2011, \$1 million were dispersed across 7 pilot projects



Next Steps



Next Steps

- We will email you the toolbox resources within the next day
- Please review and provide feedback by May 8th
- Send comments or questions to:
Beth.Rodehorst@icf.com

Thank you!





PROPOSED MICROTRANSIT PILOT

City of Los Angeles Department of Transportation, Transit

APRIL 30, 2018

Project Summary

City of Los Angeles Department of Transportation, Transit

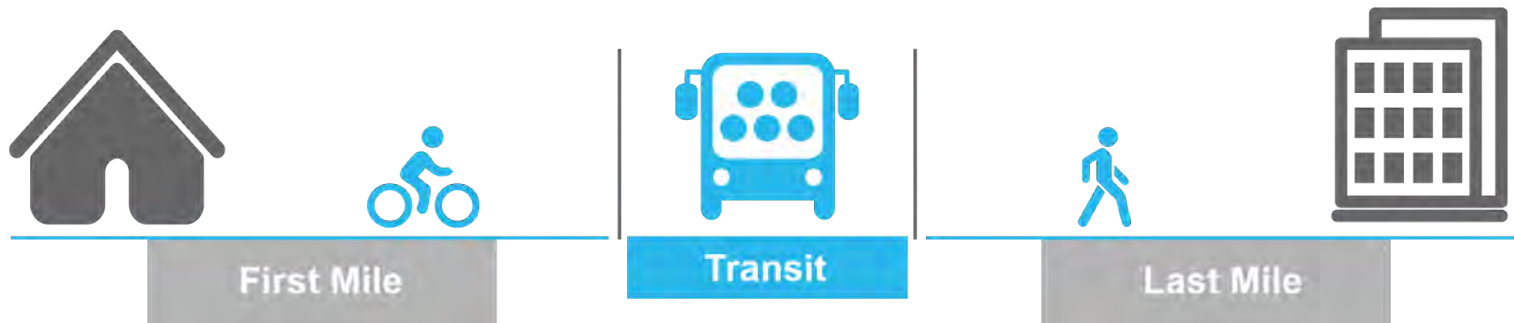
- Proposed deployment of microtransit pilot on Westside of Los Angeles
- Application of on-call transit service enhanced by mobile phone technology
- Demand-based service vs. supply-based service



Goals

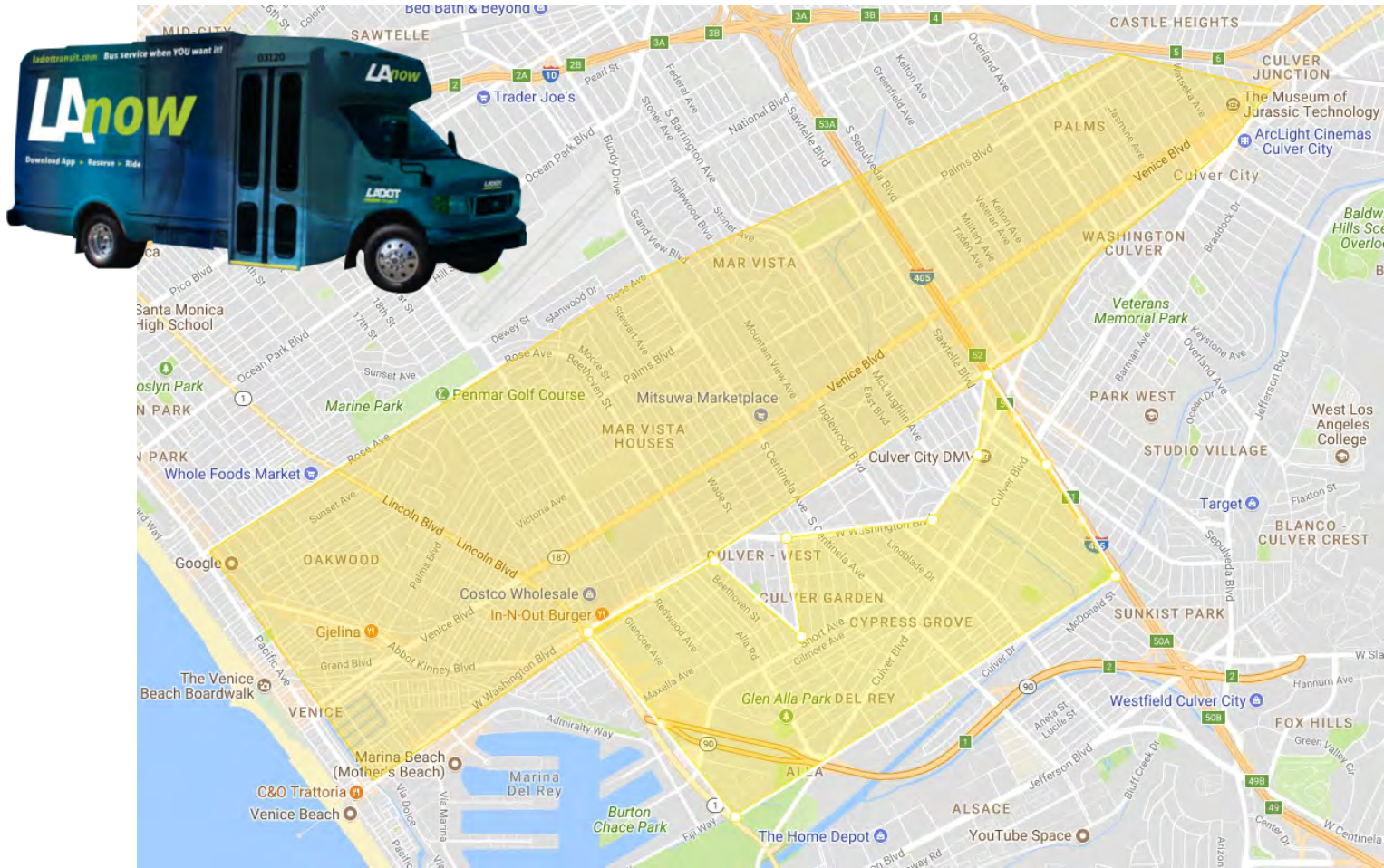
City of Los Angeles Department of Transportation, Transit

- Launch pilot in 2018
- Demonstrate pilot for one year
- LADOT Transit Service Analysis recommendation
 - Support and enhance existing public transit service and regional rail
 - First Mile/Last Mile option



Proposed Project Location

City of Los Angeles Department of Transportation, Transit



RESEARCH

Contracting Model

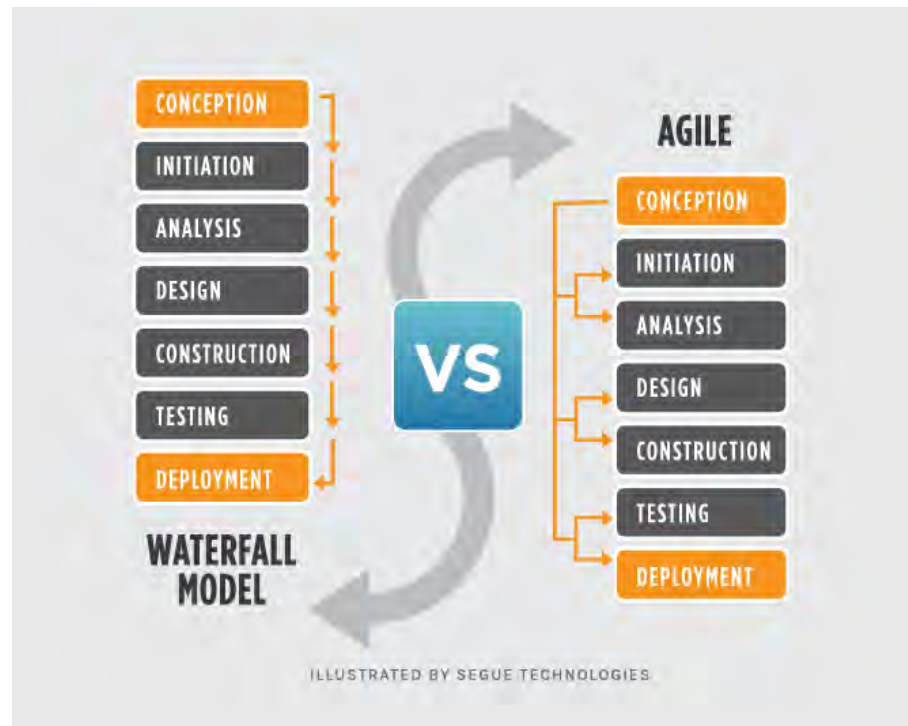
City of Los Angeles Department of Transportation, Transit

- Existing bus operations contract with MV Transit and its subconsultant, DemandTrans
- Allows LADOT some flexibility

Project Management Model

City of Los Angeles Department of Transportation, Transit

- Not a standard transit or transportation construction project
- Merger of transit operations with software development
- Providing a quality product and service



Service Model

City of Los Angeles Department of Transportation, Transit

- Corner-to-corner pick-up with (1-2) time points
- Origination and destination data from areas of interest
- Results from community outreach can provide insight into relative “attractiveness” of configurations
- Evaluate optimal number of vehicles and optimal time to meet travel time goals



Knowing Your Potential Rider

City of Los Angeles Department of Transportation, Transit

- Traditional transit planning is essential
- Outreach, outreach and more outreach
- Social Media and crowdsourcing



CHALLENGES

Challenges

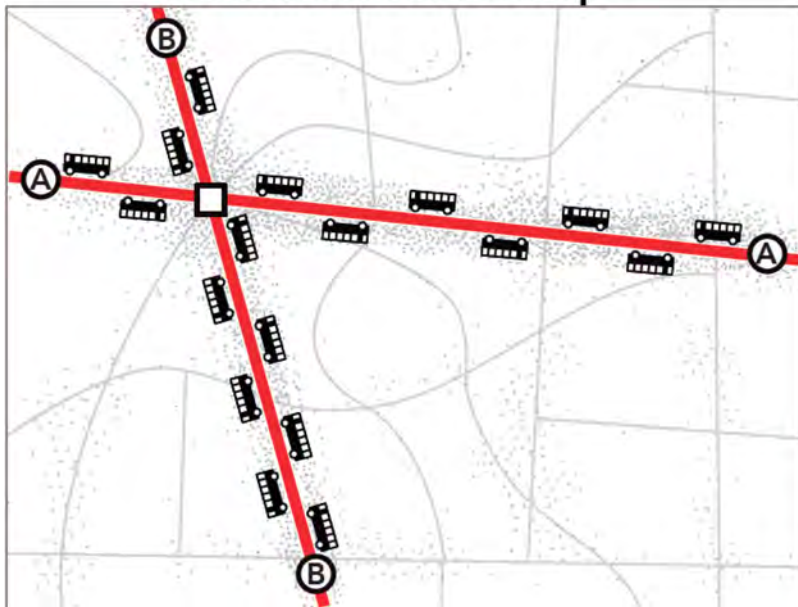
City of Los Angeles Department of Transportation, Transit

- Coordination across different jurisdictions
- Not a replacement for fixed route service
- Meant to augment existing trunkline transit service
- Inherently, microtransit is not supposed to solve all problems
- Define your own agency's success

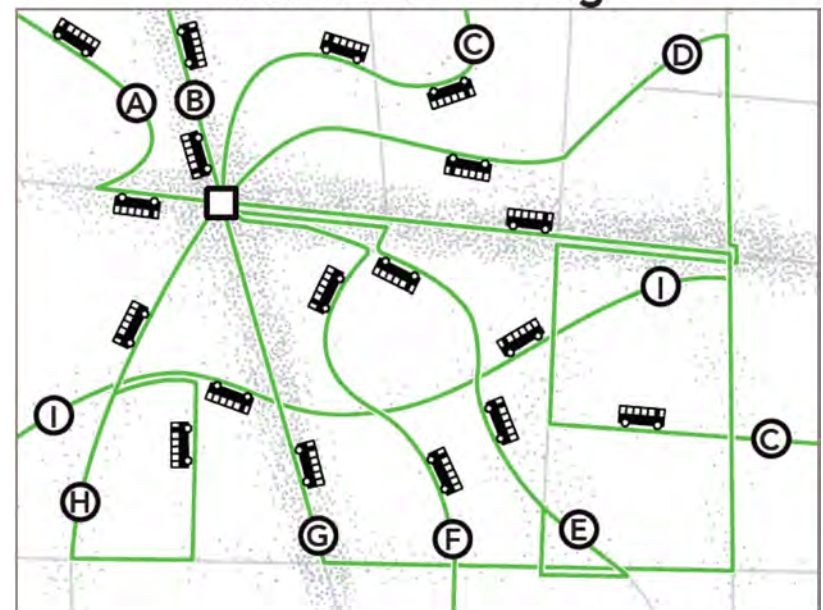
Challenges

City of Los Angeles Department of Transportation, Transit

Maximum Ridership



Maximum Coverage



Knowing Your Potential Rider

City of Los Angeles Department of Transportation Transit

- Los Angeles is **LARGE**
- Traffic congestion
- Four sub-areas of our project area differ from one other



OPPORTUNITIES

Opportunities

City of Los Angeles Department of Transportation, Transit

- Potential to introduce new riders to public transit
- Fills public transportation gaps in the transportation network
- Potential for improving customer experience

WHERE WE ARE AND NEXT STEPS

Where We Are and Next Steps

City of Los Angeles Department of Transportation, Transit

- Finalize mobile application configurations
- Continue outreach and marketing
- Work with University of Southern California to design research framework for evaluation

Nora Chin
Transportation Planner
City of Los Angeles Department of Transportation, Transit
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213-972-5064

2020 Regional Transportation Plan/ Sustainable Communities Strategy

Regional Transit Technical
Advisory Committee

Courtney Aguirre
Senior Regional Planner
April 30, 2018



What is an RTP/SCS?

- Long-term vision and investment framework
- Federal Requirements
 - Updated every 4 years to maintain eligibility for federal funding
 - Long Range: 20+ years into the future
 - Demonstrated conformity:
 - Regional emissions analysis
 - Financially constrained (revenues = costs)
 - Timely implementation of TCMs
 - Interagency consultation/public involvement
- State Requirements
 - Must meet GHG reduction targets for passenger vehicles



2020 RTP/SCS Timeline



TECHNICAL
BASES & DATA
COLLECTION



FOCUS ON
MAJOR POLICY
DIRECTIONS



ESTABLISH
THE PLAN &
ENGAGE THE PUBLIC



ADOPT
2020 RTP/SCS
& PEIR



PUBLIC AND STAKEHOLDER CONSULTATION AND ENGAGEMENT

June - December

2017

January - December

2018

January - December

2019

January - April

2020

Why update goals and guiding policies?

- SCAG's Strategic Plan
 - Produce innovative solutions that improve the quality of life for Southern Californians
 - **Create plans that enhance the region's strength, economy, resilience and adaptability by reducing greenhouse gas emissions and air pollution**
- State and federal planning factors and goals
 - Federal: Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation
 - State: Foster Livable and Healthy Communities and Promote Social Equity



Why update goals and guiding policies?

- MPO baseline
 - SCAG has goals relating to economy, mobility, environment, and healthy and complete communities
 - Unlike other MPOs, do not have housing, equity, or mobility innovation goals
- Other
 - Improve clarity
 - Strengthen language with action-oriented verbs



Adopted 2016 RTP/SCS Goals

1. Align the plan investments and policies with improving regional economic development and competitiveness.
2. Maximize mobility and accessibility for all people and goods in the region.
3. Ensure travel safety and reliability for all people and goods in the region.
4. Preserve and ensure a sustainable regional transportation system.
5. Maximize the productivity of our transportation system.



Adopted 2016 RTP/SCS Goals

6. Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).

7. Actively encourage and create incentives for energy efficiency, where possible.

8. Encourage land use and growth patterns that facilitate transit and active transportation.

9. Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.



Draft 2020 RTP/SCS Goals



1. Improve mobility, accessibility, reliability, and travel safety for people and goods.
2. Enhance the preservation, security, and resiliency of the regional transportation system
3. Increase person throughput and travel choices.
4. Reduce greenhouse gas emissions and improve air quality.
5. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.

Draft 2020 RTP/SCS Goals



6. Encourage regional economic prosperity and global competitiveness.

7. Create healthy and equitable communities.

8. Adapt to a changing climate by integrating a sustainable regional development pattern with the transportation network.

9. Preserve existing housing, while encouraging development of diverse housing types in transportation-supported areas.

10. Conserve natural and agricultural lands and restore critical habitats.

Adopted 2016 RTP/SCS Guiding Policies



1. Transportation investments shall be based on **SCAG's** adopted regional Performance Indicators.
2. Ensuring safety, adequate maintenance and efficiency of operations on the existing multimodal transportation system should be the highest RTP/SCS priorities for any incremental funding in the region.
3. RTP/SCS land use and growth strategies in the RTP/SCS will respect local input and advance smart growth initiatives.
4. Transportation demand management (TDM) and active transportation will be focus areas, subject to Policy 1.

Adopted 2016 RTP/SCS Guiding Policies



5. HOV gap closures that significantly increase transit and rideshare usage will be supported and encouraged, subject to Policy 1.
6. The RTP/SCS will support investments and strategies to reduce non-recurrent congestion and demand for single occupancy vehicle use, by leveraging advanced technologies.
7. The RTP/SCS will encourage transportation investments that result in cleaner air, a better environment, a more efficient transportation system and sustainable outcomes in the long run.
8. Monitoring progress on all aspects of the Plan, including the timely implementation of projects, programs, and strategies, will be an important and integral component of the Plan.

Draft 2020 RTP/SCS Guiding Policies



1. Transportation investments shall be based on adopted regional performance indicators and targets.
2. The highest priorities for transportation funding in the region should be to ensure mobility, accessibility, reliability, safety, and preservation of the existing transportation system.
3. RTP/SCS investments and strategies will result in reduced non-recurrent congestion and demand for single occupancy vehicle use by leveraging new transportation technologies and expanding travel choices.

Draft 2020 RTP/SCS Guiding Policies



5. Transportation investments will be encouraged to result in improved air quality and public health, and reduced greenhouse gas emissions.

6. Land use and growth strategies will respect local input, acknowledge existing disparities, promote sustainable transportation options and adaptable communities.

7. Transportation investments should reflect best known science regarding climate change vulnerability in order to make necessary design changes for long term resilience.

8. Monitoring progress on all aspects of the Plan, including the timely implementation of projects, programs, and strategies, will be an important and integral component of the Plan.

Next Steps

- April – June: Regional Planning Working Groups review and discuss relevant 2020 RTP/SCS goals and guiding policies
- July: SCAG staff share updated draft 2020 RTP/SCS goals and guiding policies with Joint Policy Committee
- September onwards: incorporate updated goals and guiding policies into the plan



Thank you

Courtney Aguirre

aguirre@scag.ca.gov

213-236-1804



18. SECTION 5307 PROGRAM REQUIREMENTS

PURPOSE OF THIS REVIEW AREA

For fixed-route service supported with Section 5307 assistance, fares charged seniors, persons with disabilities or an individual presenting a Medicare card during off peak hours will not be more than one half the peak hour fares.

Recipients are expected to have a written, locally developed process for soliciting and considering public comment before raising a fare or carrying out a major transportation service reduction.

Recipients shall develop, publish, afford an opportunity for a public hearing on, and submit for approval, a program of projects (POP).

Recipients must annually certify that they are spending at least one percent of such funds for transit security projects or that such expenditures for security systems are not necessary.

Recipients must ensure that least one percent of such funds are expended on associated transit enhancement projects.

QUESTIONS TO BE EXAMINED

1. Does the recipient have a written agreement with the Metropolitan Planning Organization (MPO) that determines their mutual responsibilities in carrying out the metropolitan transportation planning process?
2. Does the recipient provide information about its available funding under Section 5307 to the public and provide for public involvement in the in the Program of Projects (POP) it proposes to undertake?
3. Does the recipient have a written policy that describes the public comment process on increases in the basic fare structure or implementing a major service reduction that addresses the required elements?
4. For Section 5307-funded fixed-route service, does the recipient charge no more than half the peak-hour fare for seniors, persons with disabilities, and Medicare cardholders during off-peak hours?
5. Does the recipient or the recipient's UZA utilize one percent of its Section 5307 expenditures for transit security?
6. For Section 5307 funds awarded before October 1, 2015, has the recipient or the recipient's UZA met the associated transit improvement requirements?
7. Does the recipient ensure that subrecipients, contractors, and lessees that receive Section 5307 funds or use Section 5307-funded property comply with Section 5307 half-fare and public comment requirements?

INFORMATION NEEDED FROM RECIPIENT

Recipient Information Request

- Half-fare application, if applicable
- Special identification card, if applicable
- Copy of written policy for soliciting public comment prior to implementing a fare increase or major service reduction
- List of fare increases and major service reductions implemented since last review with date of implementation
- Annual POP public notices for the past three years

- Consultative process, including how coordination is performed with interested parties
- List of complaints received from interested parties in relation to the POP consultative process, if applicable
- Annual proposed POPs and final proposed POPs, if amended
- Signed recipient and MPO agreement
- Split letter(s) since the last review identifying how Section 5307 funds will be expended on security and associated transit improvements to meet the one percent requirement for the UZA
- Section 5307 annual security expenditures for the review period (by award year), along with documentation that supports the expenditures
- Documentation that current security measures meet the agency needs, if applicable
- Section 5307 annual associated transit improvements for the review period (by award year), along with documentation that supports the expenditures

Recipient Follow-up

- Samples of notices to solicit public comment (e.g., newspaper classifieds, website, etc.)
- Description of procedures for how public comment will be considered regarding decisions on implementing fare increases and major service reductions
- Internal documentation of how public comment was considered prior to implementing any fare increases or major service reductions
- Sample documentation of public hearings (board minutes, public meeting minutes, news articles, etc.)
- Staff summaries, internal memoranda documenting public participation and comments
- Internal working documents showing original plans and actual plans that were implemented for major services reductions
- Documentation for monitoring fare increases and major service reductions implemented by subrecipients
- Most recent MPO adopted public participation plan, if applicable
- MPO TIP public notice(s) for the past three years, if applicable

5307:1. Does the recipient have a written agreement with the MPO that determines their mutual responsibilities in carrying out the metropolitan transportation planning process?

BASIC REQUIREMENT

Recipients and entities responsible for the transportation planning and programming processes in metropolitan planning areas are required to determine their mutual responsibilities in carrying out the metropolitan transportation planning process in a written agreement.

APPLICABILITY

All 5307 recipients

EXPLANATION

The planning regulations require that the MPO, the state(s), and the public transportation operator(s) cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. These responsibilities shall be clearly identified in written agreements among the MPO, the state(s), and the public transportation operator(s) serving the metropolitan planning area. Written agreements are required to address at least: 1) the recipient's responsibilities, 2) the development and sharing of information for financial plans, and 3) the development of the annual listing of obligated projects. If the recipient intends to rely on the MPOs' public involvement process to meet Section 5307 public involvement requirements, FTA encourages it to state so in the agreement.

INDICATORS OF COMPLIANCE

- a. *Is the recipient a party to a written agreement with the state, MPO, and providers of public transportation? If yes, does the agreement address:*
 - 1) *The recipient's responsibilities in carrying out the metropolitan transportation planning process?*
 - 2) *The development and sharing of information for financial plans?*
 - 3) *The development of the annual listing of obligated projects?*

DETERMINING COMPLIANCE

Obtain and review the signed agreement to ensure the required elements are included. Ensure that the recipient has signed the agreement. If the MPO is an operating entity, consult with the regional office to ascertain who the providers of public transportation are in the metropolitan planning area. Ensure that providers of public transportation and the state(s) are parties to the written agreement.

POTENTIAL DEFICIENCY DETERMINATIONS

The recipient is deficient if it does not have an agreement with the MPO, or if the agreement does not address the recipient's responsibilities, the development and sharing of information for financial plans, or the development of the annual listing of obligated projects.

DEFICIENCY CODE 5307:1-1: No current agreement or deficiencies in agreement with MPO

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office a fully executed agreement that specifies the cooperative procedures for carrying out transportation planning and programming and addresses the recipient's responsibilities, the development and sharing of information for financial plans, and the development of the annual listing of obligated projects.

The recipient is deficient if it is an MPO and the providers of public transportation and the state(s) are not parties to the agreement.

DEFICIENCY CODE 5307:1-2: All parties not signatory to the MPO agreement

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office a fully executed agreement that specifies the cooperative procedures for carrying out transportation planning and programming and addresses the recipient's responsibilities, the development and sharing of information for financial plans, and the development of the annual listing of obligated projects and includes all applicable parties as signatories.

GOVERNING DIRECTIVE

23 CFR 450.314 Metropolitan Planning Agreement

"(a) The MPO(s), the State(s), and the providers of public transportation shall cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. These responsibilities shall be clearly identified in written agreements among the MPO(s), the State(s), and the providers of public transportation serving the MPA. To the extent possible, a single agreement among all responsible parties should be developed. The written agreement(s) shall include specific provisions for the development of financial plans that support the metropolitan transportation plan (see §450.324) and the metropolitan TIP (see §450.326), and development of the annual listing of obligated projects (see §450.334)."

5307:2. Does the recipient provide information about its available funding under Section 5307 to the public and provide for public involvement in the in the Program of Projects (POP) it proposes to undertake?

BASIC REQUIREMENT

Recipients must provide for public involvement in the development of the Section 5307 Program of Projects (POP).

APPLICABILITY

All 5307 recipients

EXPLANATION

Both the planning regulations and Section 5307 require public participation. The planning regulations require that the metropolitan transportation planning process include a proactive participation plan that provides complete information, timely public notice, and reasonable public access to key decisions, and supports early and continuing involvement of the public in developing plans and Transportation Improvement Plan (TIP). (The recipient's projects must be programmed in the TIP to be eligible for funding.) Section 5307 recipients also have specific requirements for public participation related to the Program of Projects (POP). POP public participation requirements do not apply to funds flexed into a Section 5307 award.

FTA allows a recipient to rely on the locally adopted public participation requirements for the TIP in lieu of the process required in the development of the POP if the recipient has coordinated with the MPO and ensured that the public is aware that the TIP development process is being used to satisfy the POP public participation requirements. To comply with the latter requirement:

- The MPO must have an adopted public participation plan.
- The TIP document (public participation plan, notice, or TIP) must have an explicit statement that public notice of public participation activities and time established for public review of and comments on the TIP will satisfy the POP requirements. The recipient may rely on the MPO public participation process for the TIP even when notices are published less than annually.

FTA encourages recipients to state in the agreement with the MPO that it relies on the public participation process for the TIP to satisfy Section 5307 public involvement requirements for the POP.

If the recipient relies on its own process to satisfy POP public participation requirements, it must:

- Make available to the public information concerning the amount of funds available under the Section 5307 program and the POP that the recipient proposes to undertake with such funds.
- Develop a proposed POP in consultation with interested parties, including private transportation providers and human services organizations or transit operators representing the employment-related transportation needs of welfare recipients and low-income individuals.
- Publish the proposed POP in sufficient detail and in such a manner as to afford affected citizens, private transportation providers, representatives of welfare recipients and low-income individuals, and, as appropriate, local elected officials, reasonable and adequate opportunity to examine the proposed program and to comment on it and on the performance of the recipient. If the service area includes a significant number of persons with limited English proficiency, the recipient should distribute the notice to these populations. (see the Title VI section of this guide).
- Provide an opportunity for a public hearing to obtain the views of the public on the proposed POP. Most recipients include in the public notice an announcement that the proposed POP is available for review and that, if requested, a public hearing will be held. Some local laws or recipient policies make the public hearing mandatory.
- Ensure that the proposed POP provides for the coordination of Section 5307 public transportation services with transportation services assisted with other Federal sources. Coordination may occur at many levels, from simple information sharing to total consolidation of services. Participation in the public transportation-human services planning process satisfies this requirement.

- Consider comments and views received, including those of private transportation providers and human services organizations or transit operators representing the employment-related transportation needs of welfare recipients and low-income individuals, in preparing the final POP.
- Make the final POP available to the public.

Where there are multiple designated recipients and/or multiple MPOs, this public participation requirement may be met in several separate processes for the different areas involved.

INDICATORS OF COMPLIANCE

- a. *Does the designated or direct recipient rely on the MPO's public participation process for the Transportation Improvement Program (TIP) to meet Section 5307 POP public participation requirements? If no, go to indicator b.*
 - 1) *Does the MPO have an adopted public participation plan that describes the minimum required elements of its public participation process?*
 - 2) *Do the TIP document(s) state public notice of public involvement activities and time established for public review and comment on the TIP will satisfy the POP requirements of the Section 5307 Program?*
- b. *If the recipient uses its own public participation process, does it meet the requirements listed in 49 U.S.C. 5307(b)(1) through (7) concerning public participation in development of a POP?*
 - 1) *How does the recipient make available to the public information concerning the amount of funds available under the Section 5307 Program and the POP that the recipient proposes to undertake with such funds?*
 - 2) *How does the recipient develop a proposed POP in consultation with interested parties, including private transportation providers and human services organizations or transit operators representing the employment-related transportation needs of welfare recipients and low-income individuals?*
 - 3) *Is the proposed POP published in sufficient detail and in such a manner as to afford affected members of the public, private transportation providers, representatives of welfare recipients and low-income individuals, and, as appropriate, local elected officials, reasonable and adequate opportunity to examine the proposed program and to submit comments on the proposed program and on the performance of the recipient?*
 - 4) *Does the recipient provide an opportunity for a public hearing to obtain the views of the public on the proposed POP?*
 - 5) *How did the recipient ensure that the proposed POP provides for the coordination of Section 5307 public transportation services with transportation services assisted with other Federal sources?*
 - 6) *How are comments and views received considered, including those of private transportation providers and human services organizations or transit operators representing the employment-related transportation needs of welfare recipients and low-income individuals, in preparing the final POP?*
 - 7) *How is the final POP made available to the public?*

DETERMINING COMPLIANCE

For recipients that rely on the MPO's Public Participation Process (PPP): Obtain and review the MPO's adopted public participation plan to ensure it describes explicit procedures, strategies, and desired outcomes for:

Element	Addressed in Plan (page #)
Providing adequate public notice of public participation activities and time for public review and comment at key decision points, including a reasonable opportunity to comment on the proposed metropolitan transportation plan and the TIP	
Providing timely notice and reasonable access to information about transportation issues and processes	
Employing visualization techniques to describe metropolitan transportation plans and TIPs	
Making public information (technical information and meeting notices) available in electronically accessible formats and means, such as the World Wide Web	
Holding any public meetings at convenient and accessible locations and times	
Demonstrating explicit consideration and response to public input received during the development of the metropolitan transportation plan and the TIP	
Seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services	
Providing an additional opportunity for public comment, if the final metropolitan transportation plan or TIP differs significantly from the version that was made available for public comment by the MPO and raises new material issues that interested parties could not reasonably have foreseen from the public involvement efforts	
Coordinating with the statewide transportation planning public involvement and consultation processes under subpart B of this part	
Periodically reviewing the effectiveness of the procedures and strategies contained in the participation plan to ensure a full and open participation process	

NOTE: Follow-up with the recipient if unable to locate the above items in the PPP.

Review the MPOs adopted public participation plan, TIPs, and TIP public notice(s) to determine which TIP document(s) states that public notice of public involvement activities and time established for public review and comment on the TIP will satisfy the POP requirements of the Section 5307 Program.

For recipients that use their own Public Participation Process:

Review the public notices for the past three years to ensure that they address the items in the following table:

POP Elements	Comments
A brief description of the projects	
Sub-allocation among public transportation providers, if applicable	
Total project costs	
Federal share for each project	

Obtain and review documentation that describes the consultative process and obtain documentation (i.e., meeting agendas, internal communications, information regarding the MPO planning process, documents relating the public transit-human services coordinated planning process, etc.) to ensure that the recipient consulted with interested parties, including private transportation providers and human services organizations or transit operators representing the employment-related transportation needs of welfare recipients and low-income individuals. Obtain and review documentation, such as a public notice, to ensure that the recipient provided an opportunity for a public hearing. Obtain and review documentation of the consultative process and comments received to ensure that the proposed POP provides for the coordination of Section 5307 service with transportation services assisted with other Federal sources. Obtain and review written comments received, transcripts of public hearings and meetings, and internal reports that address the comments to ensure they were considered prior to final issuance. Review board minutes and agendas of subsequent meetings to determine if the comments were presented to the Board. Follow up onsite for additional information on how the recipient’s decisionmakers considered any comments received.

Obtain and review the Section 5307 public notices for the past three years to determine if the final POP was made available to the public.

POTENTIAL DEFICIENCY DETERMINATIONS

The recipient is deficient if it relies on the MPO’s public participation process to satisfy POP public participation requirements, but the MPO does not have an adopted public participation plan that describes the minimum required elements of the public participation process.

DEFICIENCY CODE 5307:2-1: No MPO public participation plan that describes the minimum elements

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office its own process for involving the public in the development of the POP.

The recipient is deficient if it relies on the MPO’s public participation process to satisfy POP public participation requirements, but none of the MPO’s TIP documents (public participation plan, notice, or TIP) explicitly state they satisfy the Section 5307 POP requirements.

DEFICIENCY CODE 5307:2-2: TIP documents missing explicit POP statement

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office its own process for involving the public in the development of the POP.

NOTE: If the recipient chooses to continue using the MPO's public participation process, it must submit documentation that the process meets the requirements.

The recipient is deficient if it (1) failed to make available to the public the amount of Section 5307 funds, (2) did not develop the proposed POP in consultation with interested parties, (3) did not publish a proposed POP, (4) did not provide an opportunity for a public hearing on the proposed POP, (5) did not ensure that a proposed POP provides for the coordination of Section 5307 services with transportation assisted from other Federal sources, (6) did not consider comments received in preparing the final POP, or (7) did not make the final POP available to the public.

DEFICIENCY 5307:2-3: Elements missing in POP public participation procedures

SUGGESTED CORRECTIVE ACTION 1: The recipient must submit to the FTA regional office a procedure for making available to the public the amount of Section 5307 funds and evidence of its implementation.

SUGGESTED CORRECTIVE ACTION 2: The recipient must submit to the FTA regional office a procedure for developing the proposed POP in consultation with interested parties, including private transportation providers and human services organizations or transit operators representing the employment-related transportation needs of welfare recipients and low-income individuals, along with evidence of its implementation.

SUGGESTED CORRECTIVE ACTION 3: The recipient must submit to the FTA regional office a procedure for providing an opportunity for a public hearing on the proposed POP and evidence of its implementation.

SUGGESTED CORRECTIVE ACTION 4: The recipient must submit to the FTA regional office a procedure for providing for the coordination of Section 5307 services with transportation assisted from other Federal sources and evidence of its implementation.

SUGGESTED CORRECTIVE ACTION 5: The recipient must submit to the FTA regional office a procedure for considering comments received in preparing the final POP and evidence of its implementation.

SUGGESTED CORRECTIVE ACTION 6: The recipient must submit to the FTA regional office a procedure for publishing the proposed and final POP, along with copies of the final published POPs.

GOVERNING DIRECTIVES

23 CFR 450.316 Interested parties, participation, and consultation

“(a) The MPO shall develop and use a documented participation plan that defines a process for providing individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

- (1) The MPO shall develop the participation plan in consultation with all interested parties and shall, at a minimum, describe explicit procedures, strategies, and desired outcomes for:
 - (i) Providing adequate public notice of public participation activities and time for public review and comment at key decision points, including a reasonable opportunity to comment on the proposed metropolitan transportation plan and the TIP;
 - (ii) Providing timely notice and reasonable access to information about transportation issues and processes;
 - (iii) Employing visualization techniques to describe metropolitan transportation plans and TIPs;
 - (iv) Making public information (technical information and meeting notices) available in electronically accessible formats and means, such as the World Wide Web;
 - (v) Holding any public meetings at convenient and accessible locations and times;
 - (vi) Demonstrating explicit consideration and response to public input received during the development of the metropolitan transportation plan and the TIP;
 - (vii) Seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services;
 - (viii) Providing an additional opportunity for public comment, if the final metropolitan transportation plan or TIP differs significantly from the version that was made available for public comment by the MPO and raises new material issues that interested parties could not reasonably have foreseen from the public involvement efforts;
 - (ix) Coordinating with the statewide transportation planning public involvement and consultation processes under subpart B of this part; and
 - (x) Periodically reviewing the effectiveness of the procedures and strategies contained in the participation plan to ensure a full and open participation process.”

FTA Circular 9030.1E, Chapter V, Section 6 Program of Projects and Public Involvement Requirements

“d. Satisfying the Requirement for Public Participation in Development of the POP using the Transportation Improvement Program Process. Federal transit law and joint FHWA/FTA planning regulations governing the metropolitan planning process require a locality to include the public and solicit comment when the locality develops its metropolitan long-range (twenty-year) transportation plan and its (four-year) metropolitan TIP. Accordingly, FTA has determined that when a recipient follows the procedures of the public involvement process outlined in the FHWA/FTA planning regulations, the recipient satisfies the public participation requirements associated with development of the POP that recipients of Section 5307 funds must meet. See 23 CFR part 450 and 49 CFR part 613 (specifically Subpart B, “Statewide Transportation Planning,” and Subpart C, “Metropolitan Transportation Planning and Programming”). A recipient that chooses to integrate the two should coordinate with the MPO and make sure the public knows that the recipient is using the public participation process associated with TIP development to satisfy the public hearing requirements of Section 5307(b). The recipient must ensure the TIP document explicitly states that public notice of public involvement activities and time established for public review and comment on the TIP will satisfy the POP requirements of the Section 5307 Program.”

“A POP is a list of projects proposed by the designated recipient to be funded from the UZA’s Section 5307 apportionment. If more than one recipient will apply for grants for projects in the POP, each grant application must include the portion of the POP that identifies the projects to be funded in the grant. The POP must include a description of each project to be funded from the UZA’s apportionment, including any suballocation among public transportation providers, total project costs, local share, and federal share for each project. Where there are multiple designated recipients or MPOs for a UZA, the POP may be presented in several separate parts for the purpose of programming and public participation...”

c. Public Participation Requirements. To receive a grant under Section 5307, a recipient must meet certain requirements concerning public participation in development of a POP and must certify to

compliance with these requirements. The requirements are listed in 49 U.S.C. 5307(b)(1) through (7) and are discussed in the paragraphs below. The recipient may satisfy these requirements in whole or in part through the development of the metropolitan TIP and the local coordinated public transit–human service transportation plan.

Either the designated recipient for a UZA or each individual direct recipient must:

- (1) Make available to the public information concerning the amount of funds available under the Section 5307 Program and the POP that the recipient proposes to undertake with such funds;
- (2) Develop a proposed POP for activities the designated recipient will finance, in consultation with interested parties, including private transportation providers and human services organizations or transit operators representing the employment-related transportation needs of welfare recipients and low-income individuals;
- (3) Publish the proposed POP in sufficient detail and in such a manner as to afford affected members of the public, private transportation providers, representatives of welfare recipients and low-income individuals, and, as appropriate, local elected officials, reasonable and adequate opportunity to examine the proposed program and to submit comments on the proposed program and on the performance of the recipient;
- (4) Provide an opportunity for a public hearing to obtain the views of the public on the proposed POP;
- (5) Ensure that the proposed POP provides for the coordination of Section 5307 public transportation services with transportation services assisted with other federal sources;
- (6) Consider comments and views received, including those of private transportation providers and human services organizations or transit operators representing the employment-related transportation needs of welfare recipients and low-income individuals, in preparing the final POP; and
- (7) Make the final POP available to the public. Note: Where there are multiple designated recipients and/or multiple MPOs, this public participation requirement may be met in several separate processes for the different areas involved.”

5307:3. Does the recipient have a written policy that describes the public comment process on increases in the basic fare structure or implementing a major service reduction that addresses the required elements?

BASIC REQUIREMENT

Recipients are expected to have a written policy that describes the public comment process on increases in the basic fare structure and on major service reductions.

APPLICABILITY

All 5307 recipients

EXPLANATION

Section 5307 recipients certify annually that they have a locally developed process to solicit and consider public comment prior to raising a fare or implementing a major reduction in public transportation service. Recipients are expected to have a written policy that describes the public comment process. The recipient is responsible for defining a major service reduction. This can be defined as a standard, such as elimination of a route or reduction of “X” percent of service hours or miles.

The policy should provide an opportunity for a public hearing or meeting for any fare increase or major service reduction. It should describe how such meetings will be conducted and how the results will be considered. A public meeting is not mandatory; however, an opportunity for a public meeting in order to solicit comment must be provided. Some recipients offer an opportunity for public comment for all fare and service changes.