



TRANSIT IS ESSENTIAL

Recommendations for the Future of Transit



COVID-19 TRANSIT CRISIS RELIEF TASK FORCE MEMBER AGENCIES

Representatives from these public transit system member agencies participated on the Task Force:

Alameda-Contra Costa Transit District

Central Contra Costa Transit Authority

Golden Empire Transit District (Chaired by Karen King, CEO; and Vice Chair, California Transit Association)

Long Beach Transit

Los Angeles County Metropolitan Transportation Authority

Monterey-Salinas Transit

Orange County Transportation Authority

San Diego Metropolitan Transit System

San Francisco Bay Area Rapid Transit District

San Mateo County Transit District

Santa Maria Area Transit

Victor Valley Transit Authority

OVERVIEW

The California Transit Association's recommendations for the "Future of Transit" are presented in this report as elective "*best practices*" for consideration and possible implementation by California's transit agencies. The recommendations seek to improve the safety, efficiency, and viability of transit operations during the COVID-19 pandemic and aim to establish a more reliable and resilient public transportation network in the future that expands access to mobility and economic opportunity to all Californians.

The elective nature of the recommendations explicitly and purposefully recognizes that some transit agencies may struggle to implement these "best practices," even if agency leadership fully agrees with the recommendations, whether due to insurmountable resource limitations or local community priorities.

The recommendations in this report were developed and finalized by the Association's COVID-19 Transit Crisis Relief Task Force in spring-summer 2020 based on survey data collected from members of the following Association standing committees and other groups:

- Operations Committee
- New Mobility Task Force
- State Legislative Committee
- Federal Legislative Committee
- Business Member Advisory Group

The survey data reflects responses, from 40 survey participants, to various proposed measures impacting transit operations, technology and land-use. Association staff identified the proposed measures, as informed by research published by policy think tanks, transportation consultancies, news articles and industry guidance documents. See the report's **Appendices** for a list of the proposed measures, a summary of the initial survey data, a summary of the prioritization survey conducted by the COVID-19 Transit Crisis Relief Task Force, and an overview of the resources staff analyzed to cull the initial options.

Additionally, this report includes several policy recommendations, which reflect various policy priorities already adopted by the Association, in documents such as its [2020 State Legislative Program](#) and [2020 Federal Legislative Program](#), and which have gained new urgency in the aftermath of the pandemic.

Beyond their intended use by California transit agencies, the recommendations in this report will be provided to the American Public Transportation Association for consideration by its Mobility Recovery & Restoration Task Force as well to the California State Legislature and the United States Congress.

The recommendations in this report are not intended to override any federal, state or local laws, regulations or guidance.

RECOMMENDATIONS TRANSIT OPERATIONS

1. DIRECT RIDERS TO WEAR FACE COVERINGS

Justification

Directing transit riders to wear face coverings on transit vehicles and at transit stations and stops, consistent with guidance from the California Department of Public Health, helps reduce the rate of COVID-19 transmission between riders and helps maintain a safe work environment for transit operators.

A Snapshot from California

California transit agencies began to direct transit riders to wear face coverings as early as April 2020.

In June 2020, the California Department of Public Health issued new guidance requiring Californians to wear facing coverings when they are in “high-risk situations,” including waiting for or riding on public transportation or paratransit or while in a taxi, private car service, or ride-sharing vehicle; and driving or operating any public transportation or paratransit vehicle, taxi, or private car service or ride-sharing vehicle when passengers are present.¹ This guidance is further reflected in the State of California’s COVID-19 Industry Guidance: Public and Private Passenger Carriers, Transit and Passenger Rail, developed by the California Department of Public Health (CDPH), Cal/OSHA and the California State Transportation Agency.²

¹ California Department of Public Health, [“Guidance for the Use of Face Coverings.” June 18, 2020.](#)

² California Department of Public Health, Cal/OSHA, California State Transportation Agency, [“COVID-19 Industry Guidance: Public and Private Passenger Carriers, Transit and Passenger Rail.” July 2, 2020.](#)

2. SUPPORT INSTALLATION OF PROTECTIVE BARRIERS FOR OPERATORS, WHERE FEASIBLE

Justification

Installing barriers in transit vehicles to protect transit operators, where feasible, can provide added protection against COVID-19 transmission to operators and riders alike.

A Snapshot from California

The Antelope Valley Transit Authority just authorized the purchase and installation of 57 barriers to help protect bus operators and riders during the ongoing COVID-19 pandemic.³

Meanwhile, staff in the Overhaul and Repair Division of the Santa Clara Valley Transportation Authority repurposed old pull-down sunshades from decommissioned buses to quickly outfit VTA's bus fleet with new and economical protective barriers.⁴



³ Antelope Valley Press, [“Protection Barriers Coming to AVTA’s Bus Fleet.” May 2020.](#)

⁴ Mass Transit, [“Santa Clara VTA workers rise to challenge, find creative solution to protect their own.” May 2020](#)

3. UPDATE VENTILATION SYSTEMS OR IMPROVE AIR FLOW IN TRANSIT VEHICLES

Justification

Research into the impacts of ventilation systems on the spread of COVID-19 is limited; however, transit agencies across Asia are taking precautionary steps to enhance HVAC filtration and increase natural ventilation – as complements to more comprehensive public health strategies – to reduce the risk of infection on transit vehicles.

Furthermore, guidance released by the American Public Transportation Association this summer acknowledges that “adequate ventilation and air filtration of HVAC systems can reduce the likelihood of airborne exposure,” but stops short of recommending any technology, treatment, or method until further research is conducted.⁵

A Snapshot from California

Researchers at Fresno State, in partnership with the Fresno County Rural Transit Authority, have begun to study airflow on transit buses and strategies for mitigating potential virus circulation and infection through HVAC systems.⁶

Results from that study are expected to be released in 2021.

⁵ American Public Transportation Association, [“Cleaning and Disinfecting Transit Vehicles and Facilities During a Contagious Virus Pandemic,” June 2020.](#)

⁶ ABC30, [“Fresno State team researching how viruses spread in buses.” June 2020.](#)

4. ADOPT AND PUBLICIZE ENHANCED CLEANING METHODS

Justification

Transit agencies around the world have responded to the pandemic by announcing expanded cleaning schedules for transit vehicles, transit stations, administrative offices and operational facilities; making hand sanitizer dispensers and hand-washing stations available; and, equipping drivers with antiseptic wipes and PPE to help reduce coronavirus transmission rates. Publishing these current and new cleaning methods and hygiene protocols through various media channels can help build trust with riders and the broader public that transit vehicles are safe for use.

A Snapshot from California

In May 2020, BART published its “15-Step Plan to Welcome Riders Back,” which outlines new measures, protocols and technologies the agency is implementing to restore, and promote trust in, its service. The plan, which was promoted heavily on BART’s Twitter account, highlights that BART is using “hospital-grade disinfectants in stations and on-board trains” and “electrostatic foggers on train cars that spray disinfecting mist that coats and clings to surfaces,” and is “evaluating a variety of new cleaning procedures such as ultraviolet disinfecting.”⁷

The Orange County Transportation Authority (OCTA) has promoted its cleaning protocols and safety messages using exterior ads, bus interior cards, on its website, in videos and with brochures.



⁷ BART, [“BART’s 15-Step Plan to Welcome Riders Back,” May 2020.](#)

5. PRIORITIZE SERVICE RESTORATION IN HIGH RIDERSHIP CORRIDORS

Justification

Prioritizing service restoration in high ridership corridors can help transit agencies maximize the mobility benefits of limited operating budgets and help maintain physical distance between riders.

In many California communities, the corridors with the highest ridership are also home to economically and environmentally disadvantaged communities, allowing service restoration in these corridors to immediately benefit the communities most in need of high-quality public transportation.

In the long-run, this recommendation, which complements efforts routinely conducted by transit agencies to revamp their service through comprehensive operational analyses and in response to changing local demographics, geospatial shifts in the housing-jobs balance, and other emerging trends affecting transit ridership, will increase the efficiency of transit service.

A Snapshot from California

In the weeks following the Bay Area’s shelter-in-place order, the San Francisco Municipal Transportation Agency (SFMTA) used travel data to make targeted service reductions. Now, as more San Franciscans return to work and demand for transit increases, SFMTA is using data on shifting customer travel patterns and Muni’s Equity Strategy to restore service.⁸

As the economy has improved, Golden Empire Transit District has begun to put “shadow buses” into service in corridors with high ridership. These buses, which trail lead buses running on GET’s Saturday schedule, allow operators to cap the capacity of lead buses to facilitate social distancing while not diluting GET’s overall capacity or the quality of their passengers’ customer experience. As ridership continues to return, GET will build more of these shadow buses into their bus schedule, increasing frequency on the busiest routes.

⁸ SFMTA, [“A Data-Driven Transportation Recovery.” May 26, 2020.](#)

6. RESTORE MORE FREQUENT SERVICE

Justification

Restoring more frequent transit service can help transit agencies stay ahead of demand, allowing riders to maintain physical distance while also avoiding overcrowding on transit vehicles.

In the long-run, more frequent transit service, which routinely ranks as the top priority for existing and potential transit riders, can help transit agencies maintain and expand their transit ridership.⁹

A Snapshot from California

According to its “15-Step Plan to Welcome Riders Back,” BART is monitoring ridership data on its train and will increase service frequency if they measure more than 30 riders per car consistently during peak hours.¹⁰

OCTA has been adding unscheduled trips when needed, based on passenger loads to allow for social distancing. In June, service was restored on many of the routes where unscheduled trips were taking place, addressing the increased demand.

⁹ Transit Center, [“Who’s On Board,” 2016](#); [“Who’s On Board,” 2019](#).

¹⁰ BART, [“BART’s 15-Step Plan to Welcome Riders Back,” May 2020](#).

7. ENGAGE MAJOR EMPLOYERS AND OTHER STAKEHOLDERS TO DEVELOP POLICIES TO EXPAND STAGGERED WORK HOURS AND SMOOTH PEAK DEMAND

Justification

Increased passenger loads during peak commute times can overwhelm transit agencies reeling from reduced operating budgets. Engaging major employers and other stakeholders, like universities and schools, to encourage them to establish staggered work hours and work (or bell) start times can help smooth passenger loads, allowing riders to maintain physical distance without requiring transit agencies to significantly increase their levels of service.

A Snapshot from California

LA Metro has begun to engage major employers, agencies and other stakeholders to develop a regional pact to expand telecommuting and implement staggered work hours, where feasible.¹¹

During the month of July, OCTA is conducting a statistically valid survey of adults in Orange County to develop an understanding of how COVID-19 has altered public attitudes, working arrangements, travel behaviors and mode choice. In addition, feedback is being sought from employers through a qualitative online survey. The data will help shape discussions with employers and other stakeholders regarding telecommuting.

¹¹ LA Metro's Recovery Task Force, ["A Path Forward – Progress Report 1," June 2020.](#)

RECOMMENDATIONS TECHNOLOGY

8. INTRODUCE DIGITAL TICKETING AND CONTACTLESS PAYMENT SYSTEMS

Justification

Introducing digital ticketing and contactless payment systems can help transit agencies maintain physical distance between transit operators and riders; limit contact with shared surfaces and objects; speed bus boarding; increase fare collection by expanding payment options; allow transit agencies to resume fare collection, where currently waived; and help lay the foundation toward greater system integration in the future.

To be clear, this recommendation works toward a goal pursued by transit agencies the world over, irrespective of the recent health pandemic. The growing body of epidemiological knowledge about how COVID-19 spreads may only be adding to and heightening focus on the many good reasons that already existed for transit to move towards these new technologies.

A Snapshot from California

In 2019, BART eliminated the sale of paper tickets at five of its stations.

Now, in the face of COVID-19, BART is accelerating its expansion of the number of stations where the reloadable Clipper card is the only fare product available for purchase. This action will help BART create a more contactless and sanitary system.¹²

¹² Mass Transit, [“BART expanding Clipper-only sales at stations through 2020.” June 2020.](#)

9. EXPAND NEW MOBILITY OPTIONS WHERE MORE COST-EFFECTIVE THAN RESTORING TRADITIONAL TRANSIT SERVICE

Justification

Transit service that was reduced or eliminated due to the COVID-19 pandemic can be restored with new mobility options and other demand response services that, in some cases, are more cost-effective and more convenient than the traditional transit service they replace. If cost savings are significant, agencies can use them to increase service levels on high ridership lines.

A Snapshot from California:



GET introduced its RYDE microtransit service in the southwest portion of its service area in April 2019. In response to the Governor's stay-at-home order, ridership dropped dramatically on all modes. RYDE, which is ADA accessible, has rebounded quicker than other modes. Riders indicate they feel safer riding with only one or two other people on the vehicles than

they do on the big bus and that they don't have to wait at bus stops or stations with other people. As a result, GET has plans to expand its microtransit service to other areas of town where requests for this service have increased dramatically and fixed route demand has not returned.

RECOMMENDATIONS LAND USE

10. WORK WITH LOCAL AND REGIONAL PARTNERS TO IMPLEMENT DEDICATED BUS LANES

Justification

Dedicated bus lanes can help improve transit travel times, making transit service that was once slow or inefficient in mixed traffic competitive with single occupancy vehicle travel. To establish dedicated bus lanes, transit agencies, which are often separate entities from the entities that control local rights of way, must work with local and regional partners.

This recommendation also represents the best thinking in the transit industry, a trend that was also well underway before the COVID-19 pandemic struck. Public transportation agencies need the policy and funding support from all levels of government to actualize the promise of dedicated lanes.

A Snapshot from California

LA Metro has partnered with the City of Los Angeles to make improvements for those using 5th and 6th Streets in downtown Los Angeles. The goal is to enhance mobility and safety for the thousands of people who walk, bike, roll, ride transit or drive in the area.¹³

In order to protect people who rely on transit from increased exposure to COVID-19 on slow or crowded buses, SFMTA is fast-tracking temporary emergency transit lanes. These lanes will support bus routes where the benefits are greatest, on current ridership, travel time data and prioritize routes that serve neighborhoods with high percentages of people of color and low-income households. Moving forward, SFMTA is using travel time data to evaluate additional locations where adding temporary emergency transit lanes would achieve the biggest time savings and provide the greatest benefit.¹⁴

¹³ LA Metro's Recovery Task Force, ["A Path Forward – Progress Report 1." June 2020.](#)

¹⁴ SFMTA, ["Fast-Tracking Transit Lanes to Help the City's Recovery." June 26, 2020.](#)

11. WORK WITH LOCAL AND REGIONAL PARTNERS TO INSTITUTE TRAFFIC SIGNAL PRIORITIZATION

Justification

Traffic signal prioritization at intersections, when coupled with other efficiency measures, like dedicated bus lanes, can reduce transit travel time and increase schedule reliability, helping to make public transit more attractive for customers and less expensive to operate.

The gains in transit efficiency from traffic signal prioritization can help maintain and expand transit ridership during the pandemic while delivering lasting benefits to transit service.¹⁵

¹⁵ Federal Highway Administration, [“Traffic Signal Timing Manual,” 2017.](#)

RECOMMENDATIONS FUNDING AND POLICY

12. PROVIDE EMERGENCY FUNDING TO TRANSIT AGENCIES

Justification

The California Transit Association's most recent analysis shows that the funding shortfall faced by transit agencies statewide – after fully accounting for emergency funding from the federal Coronavirus Aid, Relief and Economic Security Act – now exceeds \$3.1 billion.

Another round of emergency funding is critical to preventing significant and permanent reductions in transit services in communities throughout the state. Without additional funding, it could take years for public transit to recover from today's crisis, resulting in the elimination of important mobility options for millions of Californians and the unnecessary delay of California's economic recovery.

Read more at [Caltransit.org](https://www.caltransit.org).

13. INSTITUTE NEW LOCAL GOVERNMENT FUNDING OPTIONS TO SUPPORT TRANSIT AND INFRASTRUCTURE NEAR TRANSIT

Justification

California's transit agencies will likely face persistent funding shortfalls and depressed ridership for some years to come, as a result of the COVID-19 pandemic. The state can help address these challenges by empowering local governments to advance new funding options to maintain and expand transit service and promote infrastructure, including affordable housing, near public transit. These tools could come in the form of changes to Infrastructure Financing District law, California Environmental Quality Act (CEQA) incentives for development closer to transit stations, lower voter-thresholds and sub-regional initiatives for local sales tax measures, authority for transit agencies to develop projects on their own property, and the inclusion of transit-oriented development projects in existing or new programs otherwise focused on housing.

14. EXPEDITE TRANSIT PROJECT DELIVERY

Justification

According to an analysis by Holland & Knight, published in 2013, public infrastructure is the most frequent target of CEQA lawsuits, and within this category the most frequent litigation target is transit projects, which are often challenged by groups with the intent of stopping, delaying or modifying transit infrastructure.¹⁶

The state can help stop CEQA abuse and expedite the delivery of transit projects by exempting certain transit project types from CEQA altogether. This policy change would not only save project costs and support the build out of new infrastructure that reduces greenhouse gas emissions but would also strengthen the role that public transit can play in the state's economic recovery.

¹⁶ Holland & Knight, [“In the Name of the Environment,” 2013](#).

15. INCREASE FUNDING FOR ZERO-EMISSION BUSES AND CHARGING/REFUELING INFRASTRUCTURE

Justification

In December 2018, the California Air Resources Board adopted the Innovative Clean Transit regulation, requiring all California transit agencies to fully convert their bus fleets to zero-emission technology by 2040.¹⁷

While transit agencies have been enthusiastic partners in implementing the regulation, the funding shortfalls faced by transit agencies today, as a result of the COVID-19 pandemic, present new compliance challenges that were unforeseen during the promulgation of the regulation. The state and federal governments must help transit agencies overcome these challenges by increasing funding for zero-emission buses and charging/refueling infrastructure through, among other programs, the state's Cap and Trade Expenditure Plan, the federal Low or No Emission Vehicle Program, and by earmarking funding for transit agencies in the California Air Resources Board's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project and the California Energy Commission's Clean Transportation programs, which support the deployment of zero-emission heavy-duty vehicles and the buildout of charging/refueling infrastructure.

¹⁷ California Air Resources Board, ["Innovative Clean Transit Regulation Fact Sheet," May 2019.](#)

16. AUTHORIZE OPERATION OF TRANSIT BUSES ON HIGHWAY SHOULDERS

Justification

“Bus on shoulder” (BOS) describes the limited use of designated highway shoulders for low-speed transit bus operations, primarily during peak commute periods. BOS is a low-cost strategy employed by public transit agencies across the United States, as well as in Canada, to improve bus performance and reliability, bolster customer satisfaction and attract patronage. In the aftermath of the pandemic, further authorizing bus on shoulder operations in California can help transit agencies win back riders and limit the rise of single occupancy vehicle miles traveled.

17. CONTINUE TO MOVE PROJECTS THROUGH CAPITAL INVESTMENT GRANT PIPELINE, ESTABLISH CAPACITY FOR NEW PROJECTS

Justification

The Capital Investment Grant (CIG) program provides discretionary grants to transit agencies to fund capital projects, including heavy rail, commuter rail, light rail, streetcars and bus rapid transit. In recent years, the United States Department of Transportation (USDOT) has been slow to process grants in the “CIG pipeline” and has, at times, established new process barriers that slow the advancement of critical infrastructure projects. To help the economy recover from the pandemic, the federal government must fully fund existing Full Funding Grant Agreements (FFGAs), support new FFGAs, and establish capacity in the program for new projects. The California Transit Association supports legislative actions to direct USDOT to expeditiously execute FFGAs and administer the CIG program, as intended by Congress.

APPENDIX A – INITIAL SURVEY RESULTS

Table 1: Support for Proposed Measures

Proposed Measure	Support
Introduce digital ticketing and contactless payment systems	84%
Work with local and regional partners to implement dedicated bus lanes	79%
Direct riders to wear face coverings	77%
Work with local and regional partners to institute traffic signal prioritization	76%
Adopt and publicize enhanced cleaning methods	67%
Restore more frequent service	64%
Prioritize service restoration in high ridership corridors	59%
Expand new mobility where more cost-effective than restoring traditional transit service	58%
Engage major employers and other stakeholders to develop policies to expand telecommuting and staggered work hours	56%
Work with state to institute congestion pricing	50%
Update ventilation systems or improve air flow in transit vehicles	46%
Require transit agencies to develop GTFS feeds	45%
Establish maximum passenger loads	44%
Work with state to relax land-use restrictions, allowing for greater mix of mid- and high-rise buildings near transit	39%
Require spacing in, or install barriers between passengers	26%
Reduce or eliminate fares at off-peak times	23%
Require rear-door boarding	15%
Support installation of protective barriers for operators, where feasible	N/A
Introduce capacity management systems for ride/trip reservation and real time passenger loads	N/A
Update mobile apps to include vehicle retrofit status	N/A

Source: California Transit Association, Future of Transit Survey, May 2020.

APPENDIX B – PRIORITIZATION OF SURVEY RESULTS*

Chart 1: Direct Riders to Wear Face Coverings

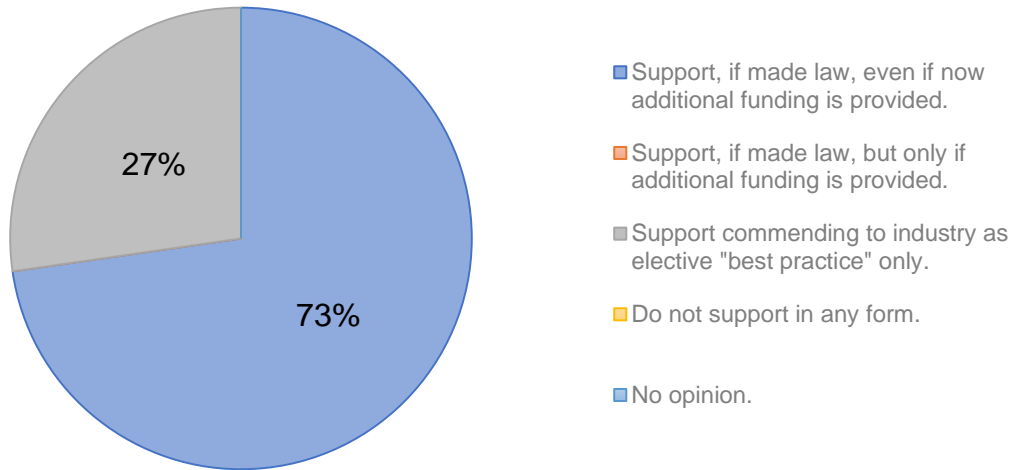


Chart 2: Adopt and Publicize Enhanced Cleaning Methods

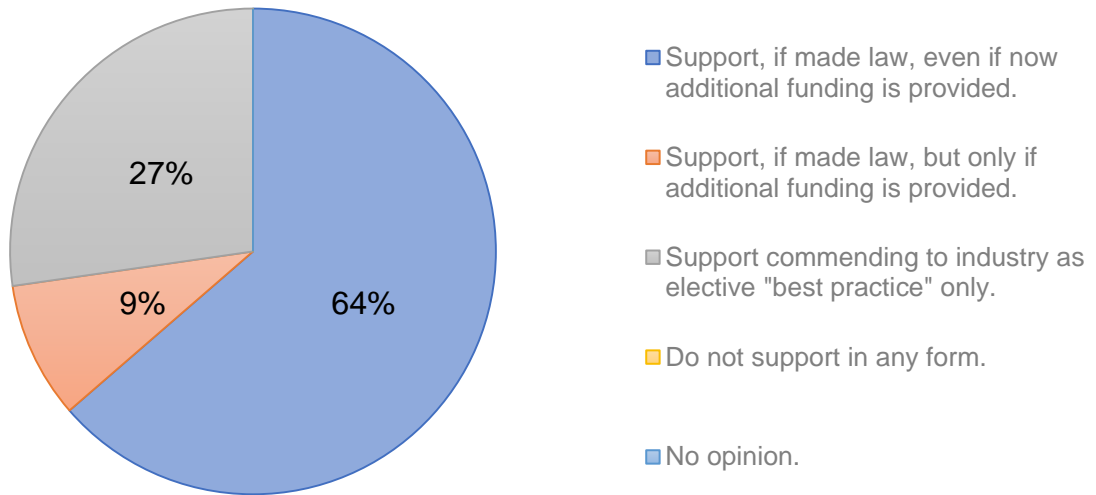
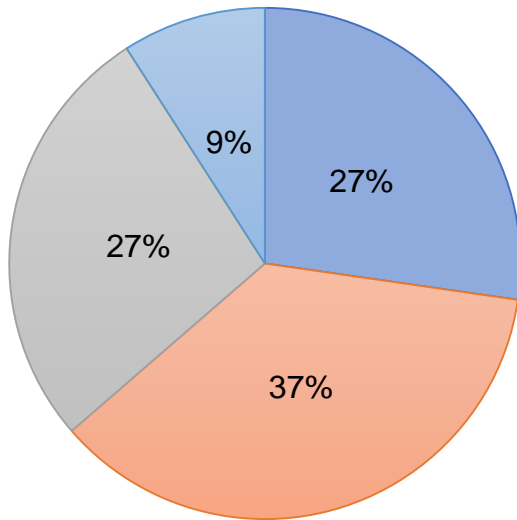
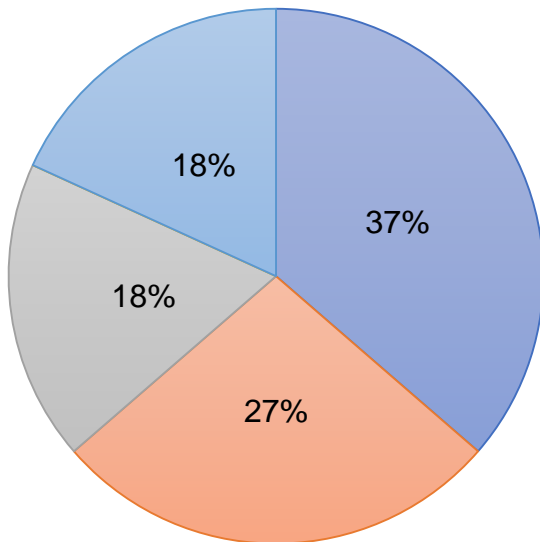


Chart 3: Restore More Frequent Service



- Support, if made law, even if now additional funding is provided.
- Support, if made law, but only if additional funding is provided.
- Support commending to industry as elective "best practice" only.
- Do not support in any form.
- No opinion.

Chart 4: Prioritize Service Restoration in High Ridership Corridors



- Support, if made law, even if now additional funding is provided.
- Support, if made law, but only if additional funding is provided.
- Support commending to industry as elective "best practice" only.
- Do not support in any form.
- No opinion.

Chart 5: Engage Major Employers and Other Stakeholders to Develop Policies to Expand Telecommuting and Staggered Work Hours

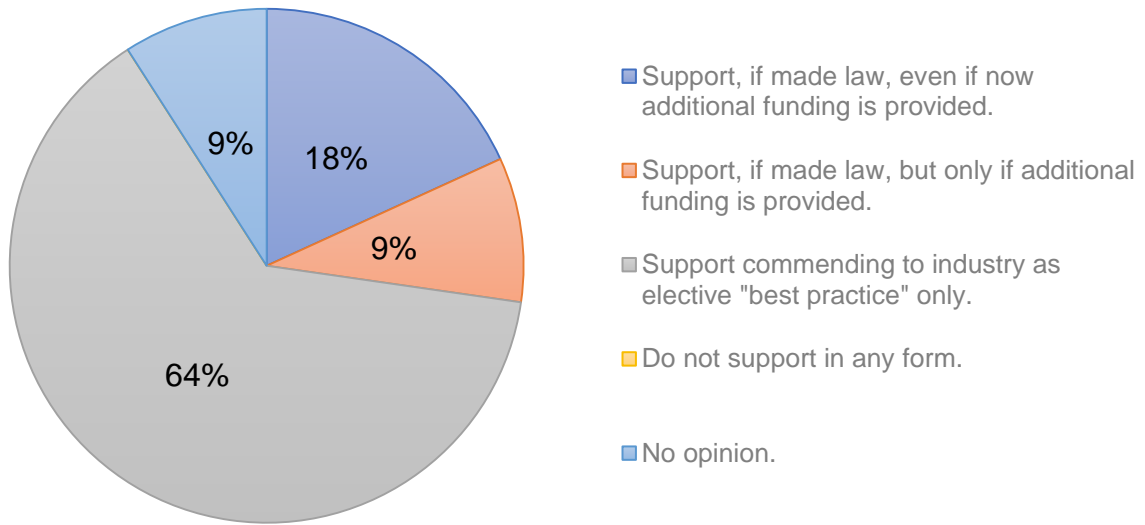


Chart 6: Update Ventilation Systems or Improve Air Flow in Transit Vehicles

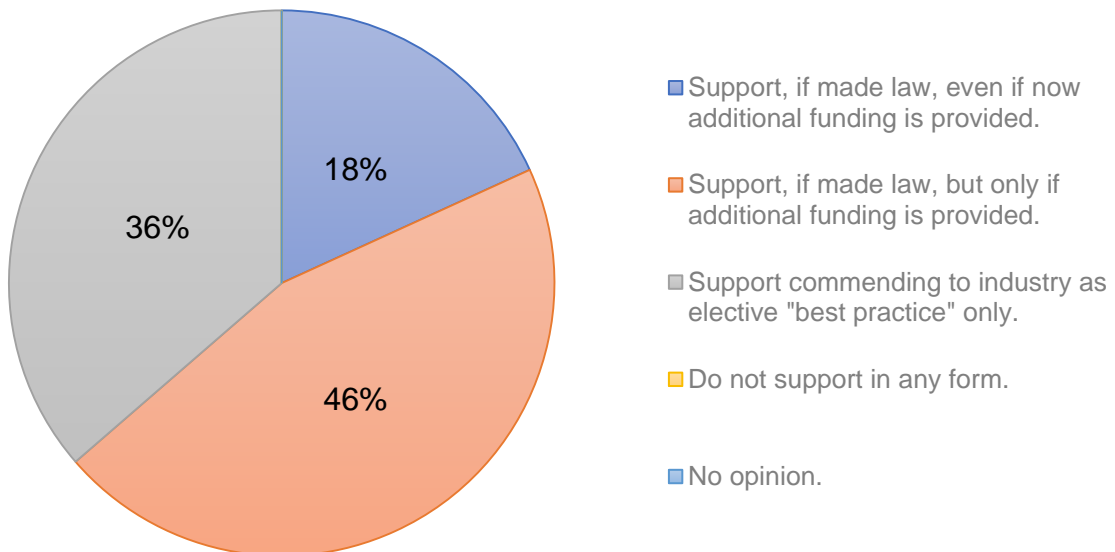


Chart 7: Require Spacing in Seating or Install Barriers Between Passengers

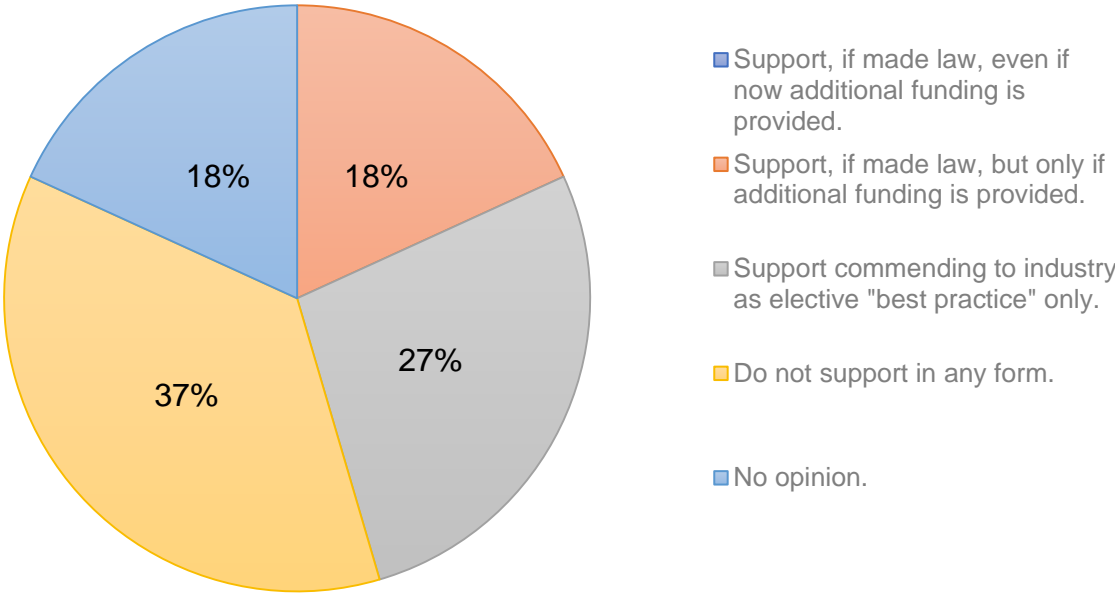


Chart 8: Reduce or Eliminate Fares at Off-Peak Times to Spread Out Commute Times

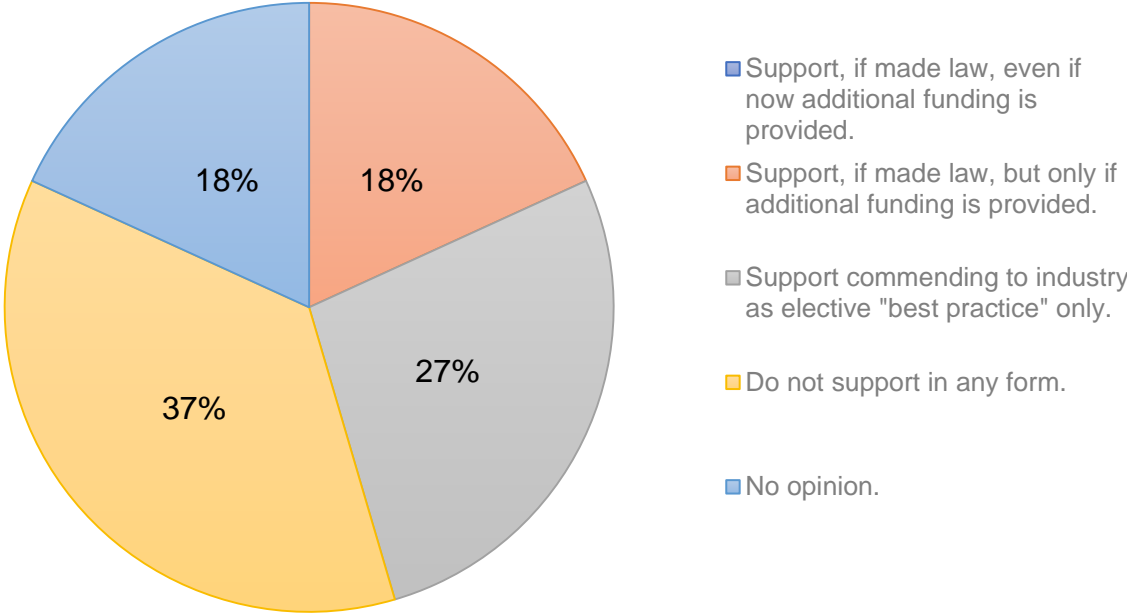


Chart 9: Require Rear-Door Boarding

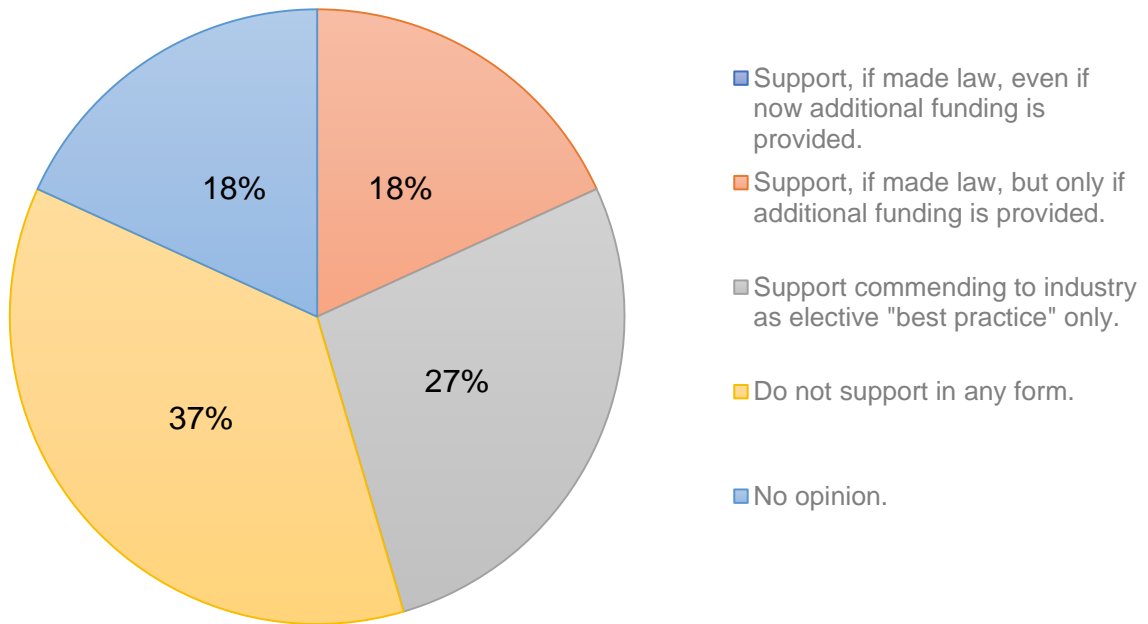


Chart 10: Support Installation of Protective Barriers for Operators, Where Feasible

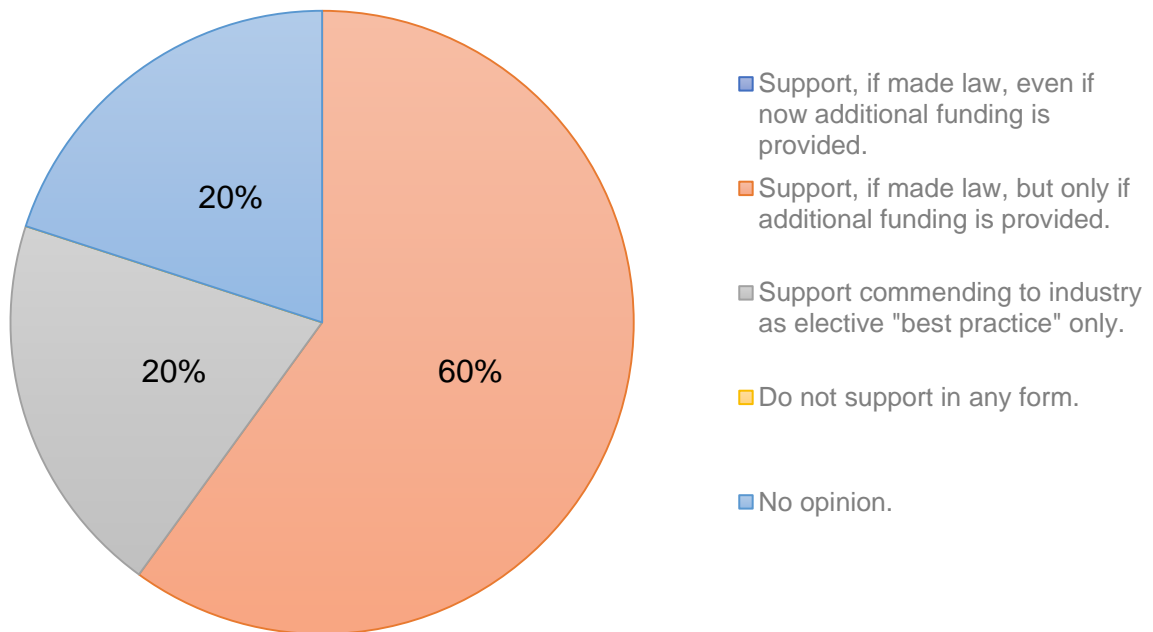


Chart 11: Introduce Digital Ticketing and Contactless Payment Systems

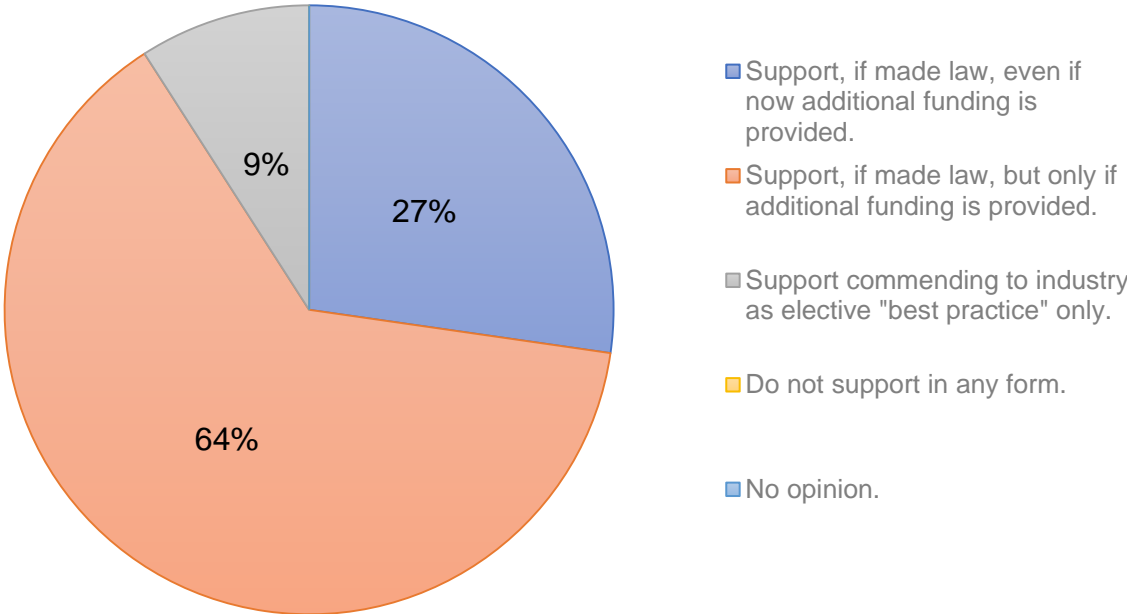


Chart 12: Expand New Mobility Options Where More Cost Effective Than Restoring Traditional Transit Service

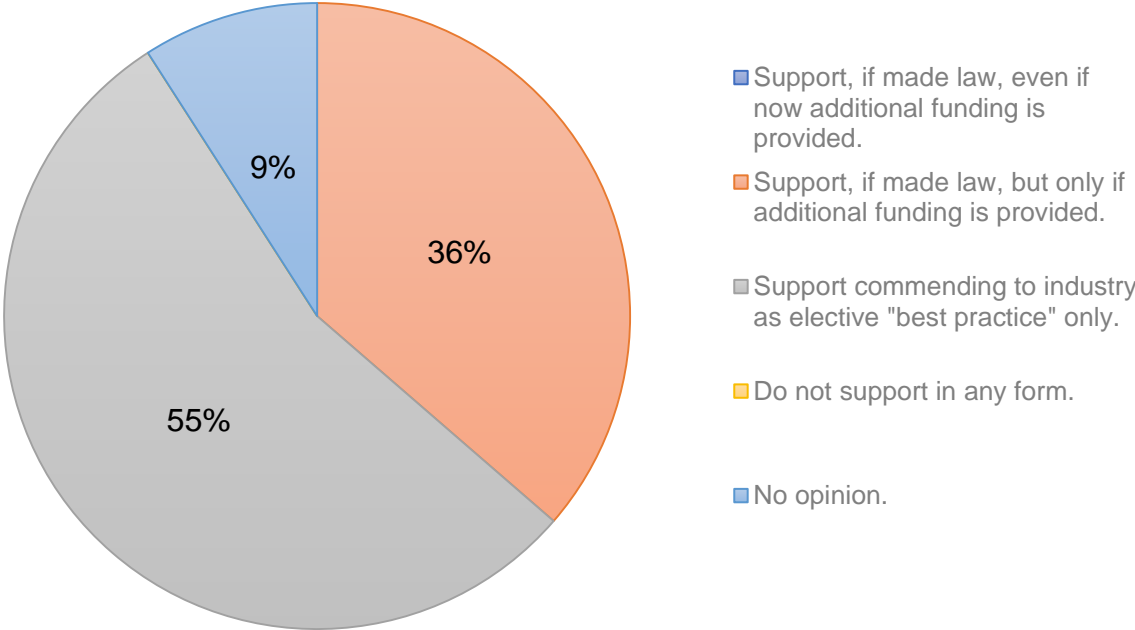


Chart 13: Require Transit Agencies to Develop GTFS Feeds

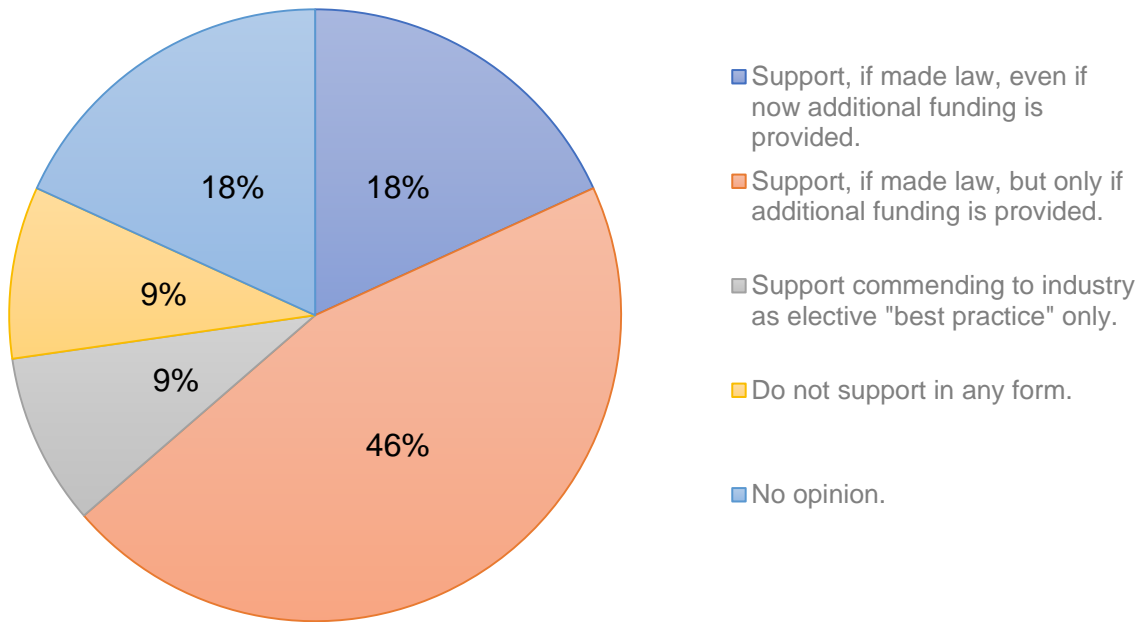


Chart 14: Introduce Capacity Management Systems That Allows for Ride/Trip Reservation and Real-Time Passenger Loads

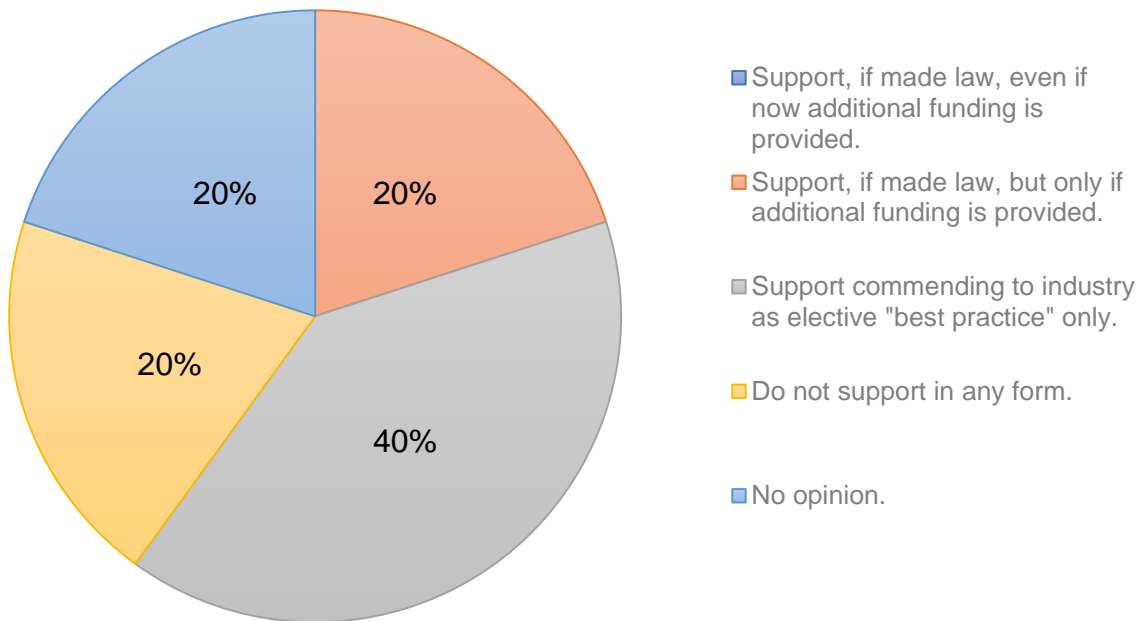


Chart 15: Update to Mobile Apps to Include Vehicle Retrofit Status

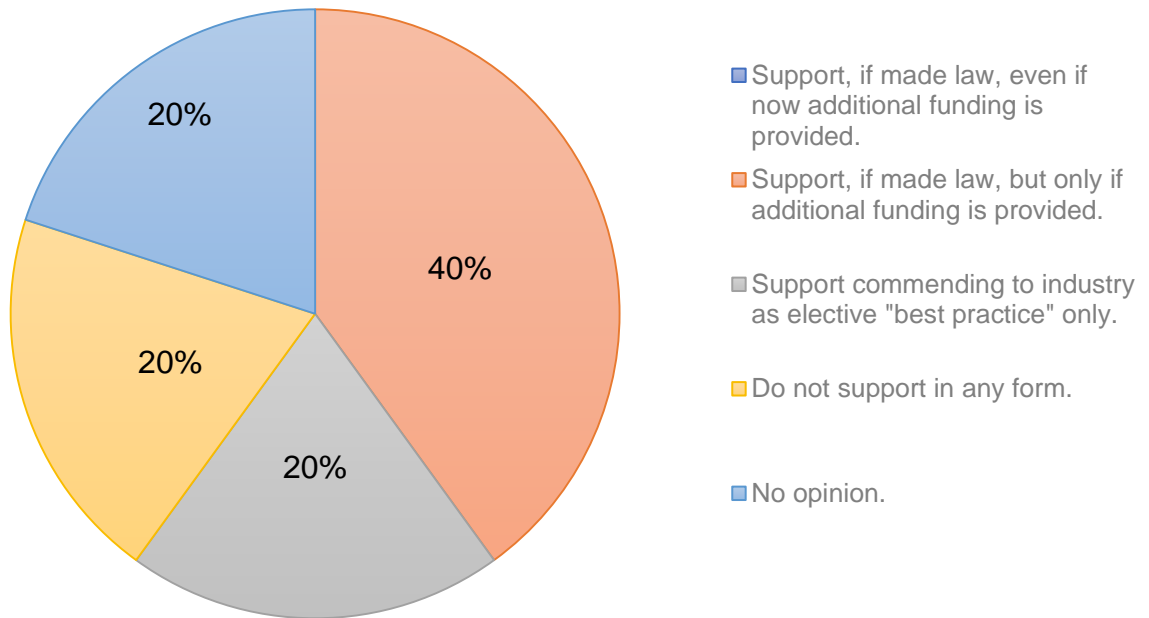


Chart 16: Work with Local and Regional Partners to Implement Dedicated Bus Lanes

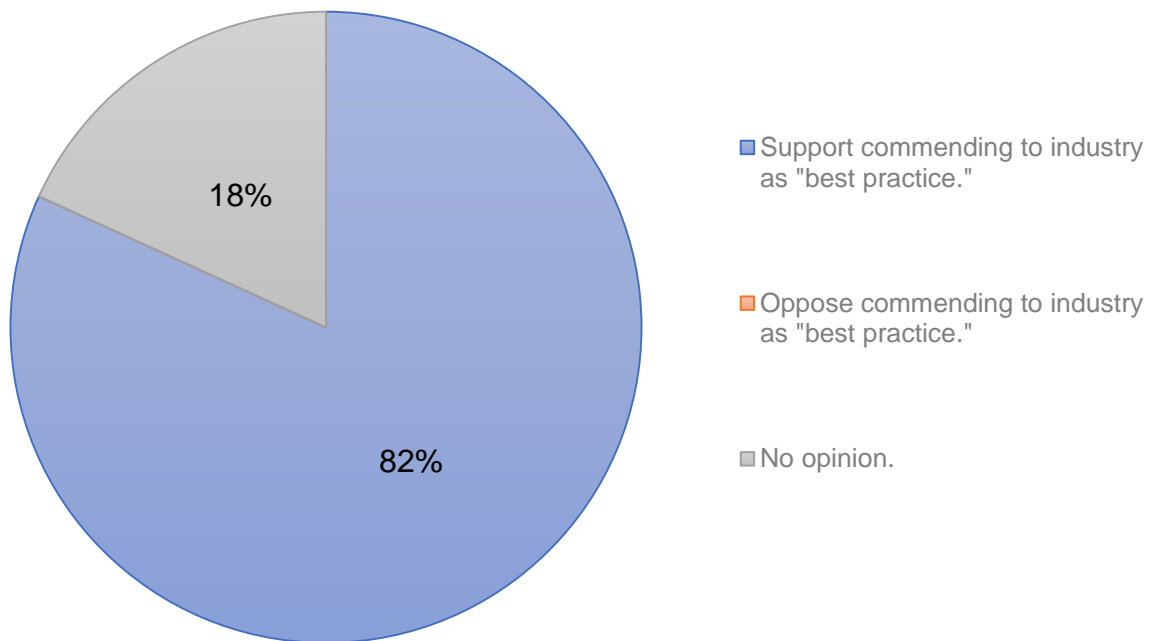


Chart 17: Work with Local and Regional Partners to Institute Traffic Signal Prioritization

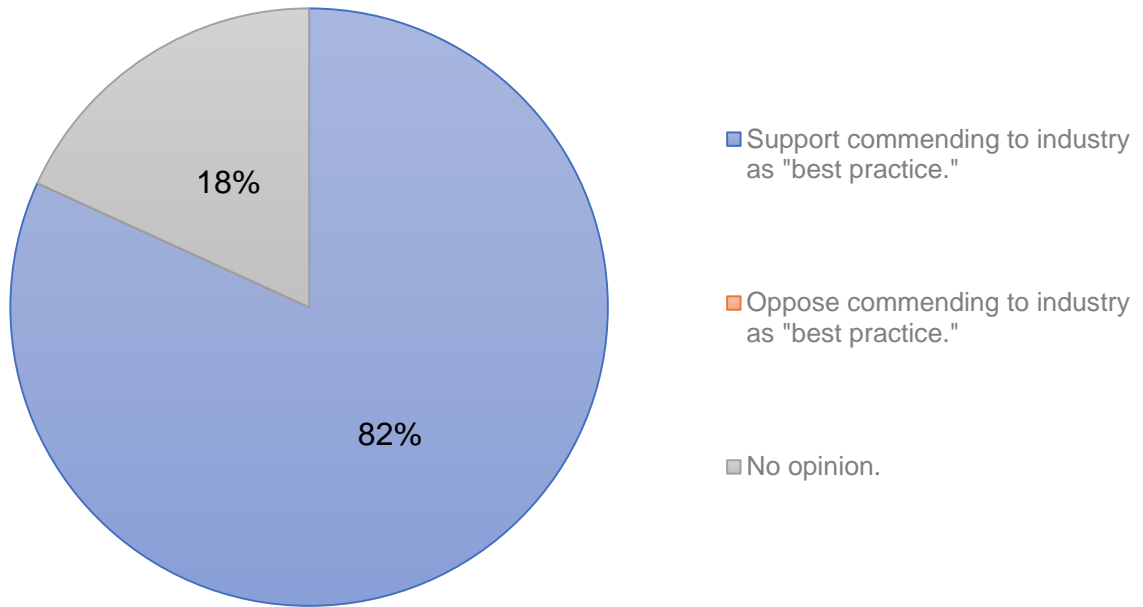


Chart 18: Work with State to Institute Congestion Pricing

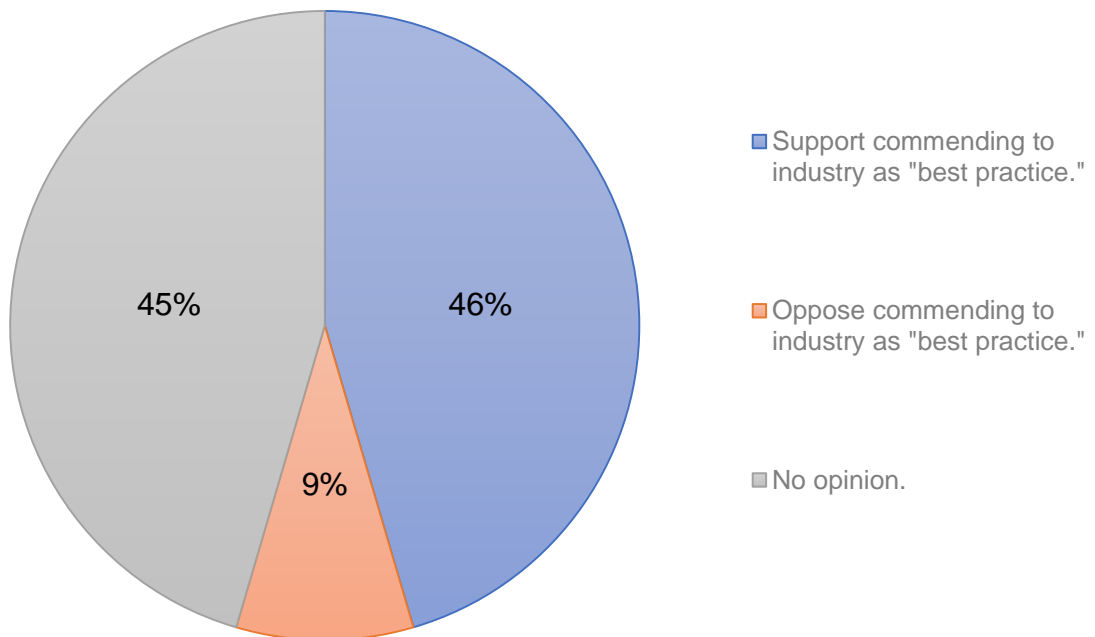
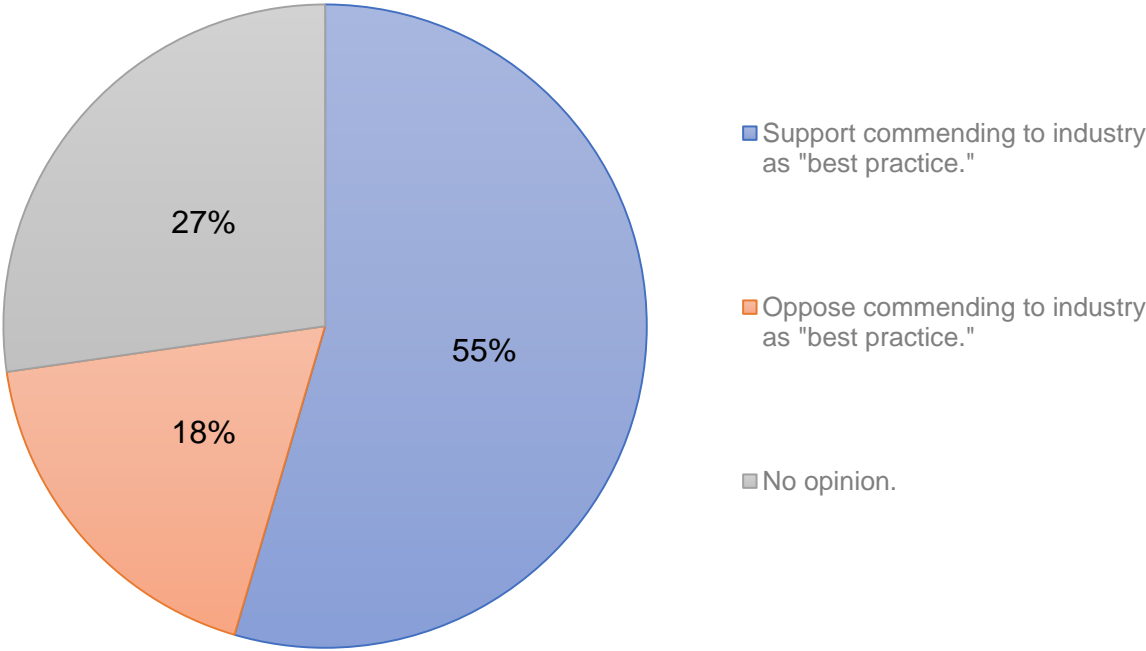


Chart 19: Work with State to Relax Land-Use Restrictions, Allowing for Greater Mix of Mid- and High-Rise Buildings Near Transit



*The Association’s prioritization survey included several measures introduced as new recommendations by respondents to the Association’s initial survey. While these measures were not voted on by initial survey respondents, their inclusion as a recommendation in this final report reflects the support of the COVID-19 Transit Crisis Relief Task Force.

APPENDIX C – OTHER RESOURCES

- **Recommendations – Transit Operations**
 - *Monitor ridership and add buses to increase frequencies along high ridership corridors*
 - CNN - [Public Transit During the Reopening: Masked Commuters and Cordoned Off Seats](#)
 - Politico – [Transit Systems Rethink as Riders Flee](#)
 - LA Metro - [COVID-19 Recovery Taskforce](#)
 - *Skip stops once ridership maximum is reached*
 - CNN - [Public Transit During the Reopening: Masked Commuters and Cordoned Off Seats](#)
 - *Cordon off seats and install barriers*
 - CNN - [Public Transit During the Reopening: Masked Commuters and Cordoned Off Seats](#)
 - Politico – [Transit Systems Rethink as Riders Flee](#)
 - A Better City - [COVID 19 and Public Transit](#)
 - *Make face coverings mandatory for riders*
 - CNN - [Public Transit During the Reopening: Masked Commuters and Cordoned Off Seats](#)
 - Politico – [Transit Systems Rethink as Riders Flee](#)
 - *Require rear-door boarding*
 - CNN - [Public Transit During the Reopening: Masked Commuters and Cordoned Off Seats](#)
 - *Improve and update ventilation systems to improve airflow and reduce transmission risk*
 - A Better City - [COVID 19 and Public Transit](#)
 - Cambridge Systematics – [How Transit Agencies Recovered From The Last Coronavirus and What it Means for Urban Sustainability](#)
 - *Reduce fares at off-peak times to spread out commuting times and promote social distancing*
 - A Better City - [COVID 19 and Public Transit](#)
 - *Develop a core transit network plan that identifies priority corridors and needs of transit-dependent riders and essential workers*
 - Seamless Bay Area et al. - [Coordinate Service Regionally and Maintain Reliable Access to Assure the Best Use of Limited Resources](#)
 - Bay Area Council and SPUR - [Prioritizing CARES Transit Investment in the Face of COVID-19](#)
 - Politico – [Transit Systems Rethink as Riders Flee](#)
 - *Allocate higher portions of budgets toward cleaning supplies and campaigns that inform the public of health measures taken.*
 - Eno Center - [How Might Personal Transportation Behaviors Change as a Result of COVID-19, and What Does That Mean for Policy?](#)
 - *Eliminate restrictions that prevent transit agencies from transporting passengers in other service areas*
 - Seamless Bay Area et al. - [Coordinate Service Regionally and Maintain Reliable Access to Assure the Best Use of Limited Resources](#)

- *Eliminate Transfer Fees - Charge riders only one fare*
 - Seamless Bay Area et al. - Coordinate Service Regionally and Maintain Reliable Access to Assure the Best Use of Limited Resources
- *Make transit free for children 12 years of age and under*
 - Seamless Bay Area et al. - Coordinate Service Regionally and Maintain Reliable Access to Assure the Best Use of Limited Resources
- *Develop regionally consistent emergency safety standards for workers and riders*
 - Seamless Bay Area et al. - Coordinate Service Regionally and Maintain Reliable Access to Assure the Best Use of Limited Resources
- **Recommendations – Technology**
 - *Adopt digital ticketing system/mobile ticket purchases, contactless payments*
 - Mass Transit Magazine - What Will Transit and Mobility Look Like after the COVID-19 Crisis?
 - Traffic Technology - Making Public Transit More Resilient to Future Pandemics
 - A Better City - COVID 19 and Public Transit
 - Politico – Transit Systems Rethink as Riders Flee
 - LA Metro - COVID-19 Recovery Taskforce
 - *Adopt new technologically sound cleaning methods such as UV, ozone and cleaning robots*
 - LA Metro - COVID-19 Recovery Taskforce
 - Cambridge Systematics - How Transit Agencies Recovered From The Last Coronavirus and What it Means for Urban Sustainability
 - *Adopt pre-trip reservation, voluntary on-board check-ins & contact tracing*
 - World Bank - Protecting public transport from the coronavirus... and from financial collapse
 - *Modernize & electrify bus fleets*
 - Mass Transit Magazine - California Transportation Agency, city of Sacramento, SacRT launch Wi-Fi bus
 - World Resources Institute - Safe, More Sustainable Transport in a Post COVID-19 World
 - *Implement more on-demand service*
 - Mass Transit Magazine - Public transit’s “road to recovery” could include more ridesharing partnerships says DePaul study
 - *Use GTFS to deliver to-the-minute service times*
 - Traffic Technology - Making Public Transit More Resilient to Future Pandemics
 - *Use passenger counter devices and cameras to restrict passenger loads*
 - Traffic Technology - Making Public Transit More Resilient to Future Pandemics
 -
- **Recommendations – Land Use**
 - *Street closures pedestrians and bicyclists have space. While temporary, this could create demand for permanent street closures*
 - Eno Center - How Might Personal Transportation Behaviors Change as a Result of COVID-19, and What Does That Mean for Policy?

- LA Metro - [COVID-19 Recovery Task Force](#)
- *Implement exclusive or preferred bus lanes, retrofitting existing infrastructure to accommodate more cycling/walking for pedestrians to socially distance.*
 - World Resources Institute - [Safe, More Sustainable Transport in a Post COVID-19 World](#)
 - Smart Growth America - [Emergency Stabilization and Economic Recovery Recommendations](#)
 - CityLab - [How U.S. Public Transit Can Survive Coronavirus](#)
 - LA Metro - [COVID-19 Recovery Task Force](#)
 - Cambridge Systematics - [How Transit Agencies Recovered From The Last Coronavirus and What it Means for Urban Sustainability](#)
 - Rocky Mountain Institute – [Getting Back On The Bus And Back To Work](#)
- *Institute traffic signal prioritization*
 - CityLab - [How U.S. Public Transit Can Survive Coronavirus](#)
- *Institute congestion pricing*
 - Eno Center – [COVID-19 Lessons for Congestion Pricing](#)
 - CityLab - [How U.S. Public Transit Can Survive Coronavirus](#)
- *Relax land-use restrictions, allow for greater mix of mid- and high-rise buildings near transit*
 - CityLab - [How U.S. Public Transit Can Survive Coronavirus](#)

Connecting us.
caltransit.org

California Transit Association
t: (916) 446-4656 f: (916) 446-4318