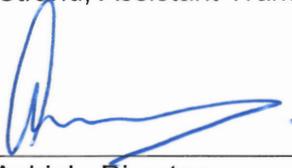


<b>MEETING DATE:</b> July 26, 2017	<b>ITEM #</b> 24
<b>SUBJECT:</b> FURTHER CONSIDERATION OF A WORKSHOP ON THE WEST SACRAMENTO MOBILITY ACTION PLAN AND TRANSIT PILOT PROJECTS	
<b>INITIATED OR REQUESTED BY:</b>  <input type="checkbox"/> Council <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Other	<b>REPORT COORDINATED OR PREPARED BY:</b> Sarah Strand, Assistant Transportation Planner  Denix Anbiah, Director Department of Public Works
<b>ATTACHMENT</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Information <input checked="" type="checkbox"/> Direction <input checked="" type="checkbox"/> Action	

**OBJECTIVE**

This report’s purpose is to provide Council with updates on the Mobility Action Plan (MAP) and related transit pilot projects; seek direction on a Pilot 2 Flexible Transportation service concept and funding model; and present sufficient information for Council to provide direction on a preferred approach to develop a Riverfront Shuttle.

**RECOMMENDED ACTION**

It is respectfully recommended that the City Council receive staff’s updates on the Mobility Action Plan and related transit pilot projects and:

1. Receive staff’s recommendation and provide direction on a preferred Pilot 2 service concept;
2. Tentatively authorize local funding for the Pilot 2 Flexible Transportation Service, not to exceed \$750,000 (including any grant funds received), and direct staff to return to Council with a funding plan to accompany a request for award of contract; and
3. Receive staff’s recommendation and provide direction on a preferred Riverfront Shuttle Approach.

**BACKGROUND**

Council identified the Public Transportation Strategy (PTS) as a Top Priority on the 2016 Strategic Plan Policy Agenda. Last June, Council directed staff to continue PTS work with a focus on streamlining transit and identifying transferrable technologies and best practices from other cities. On April 19, 2017 staff responded to Council with the presentation of the West Sacramento Mobility Action Plan (MAP) and related transit pilot projects. Council elected to include the MAP in the 2017 Strategic Plan Management Agenda earlier this year.

The MAP concept proposes to develop a prioritized set of near- to long-term investments to guide the implementation of a robust multi-modal mobility network. The plan will aim to optimize transit network efficiency, define a role for alternative and emerging mobility services (both public and private), and prepare the City for the integration of new transportation technologies. Ultimately, the MAP will equip the City to strategically leverage prioritized transportation projects to apply for grant funding that increasingly emphasizes smart mobility.

Nested under the long-term MAP concept, staff also introduced two (2) near-term Pilot Projects as immediate actions to help achieve the City’s goals of improving transit service in transit dependent and underserved neighborhoods, to include Pilot 1, the Downtown Shuttle (and Route 39 realignment), and Pilot 2, a Flexible Transportation Service that will test an on-demand microtransit system in the City. Council further directed staff to develop a separate Riverfront Shuttle for underserved transit-oriented neighborhoods. This report summarizes Council’s previous direction to-date and provides updates on these items for further discussion and direction.

**ANALYSIS**

Staff has received sufficient direction and/or authorization to move forward with the initial scoping of the broader MAP effort and to deploy the Pilot 1 Downtown Shuttle as proposed by staff on April 19<sup>th</sup>. This report submits information on the Pilot 2 Flexible Transportation Service and proposed Riverfront Shuttle to solicit additional feedback and direction from Council.

### **Mobility Action Plan (MAP)**

Per Council's approval, staff will continue to refine a detailed scope of work and cost estimate for the long-term Mobility Action Plan to inform the preparation of a late Fall application for funding through the Caltrans Sustainable Planning Grant program. Staff will return to Council for feedback and authorization later this year.

### **Pilot 1 Downtown Shuttle (& Route 39 Realignment)**

On April 19, Council authorized: 1) implementation of a Downtown Shuttle providing service every 20 minutes from the Civic Center Transit Center to Downtown Sacramento 2) realignment of existing Route 39 to provide peak-hour commute service to the Bridge District, and 3) development of a proposed Riverfront Shuttle. The new Downtown Shuttle service and Route 39 Realignment will begin as planned on July 30, 2017. A new bus stop at 5<sup>th</sup> and Bridge Street will be installed to accommodate the new Route 39 alignment. The development of a Riverfront Shuttle is further discussed below.

### **Pilot 2 Flexible Transportation Service**

On June 23, 2017, staff released a Request for Proposals (RFP) per Council authorization soliciting innovative transit solutions from a broad pool of qualified private and public mobility service providers, including Transportation Network Companies (TNCs), to assist with the design, launch, operations, maintenance, marketing, and evaluation of an on-demand microtransit service. The solicitation was designed to encourage a diverse range of proposals directed at achieving key goals expressed by Council and supported by staff, and was broadly distributed via multiple channels, including the Shared Use Mobility Center newsletter which is read widely by the new/shared mobility industry. Key challenges highlighted in the solicitation included inefficient fixed routes in Southport, the need for high quality and reliable mobility options in the Riverfront District, and the growing mobility needs of the Senior community.

The RFP stated goals of Pilot 2 included:

- Provide a safe, reliable, demand responsive flexible transportation service
- Maintain or improve the productivity and cost-effectiveness of the existing transit network
- Reduce single occupancy vehicle trips and greenhouse gas (GHG) emissions from transportation
- Connect underserved residents to key destinations/amenities and alternative modes
- Close first- and last- mile gaps at and around key transit hubs and destinations
- Increase linked multi-modal and active transportation trips

Staff received ten (10) proposals in response to the solicitation. An Evaluation Panel has been assembled to identify a shortlist to interview in late August and select a successful proposal by early September. Staff will return to Council in October to request an award of contract. Due to the active procurement process, staff is prohibited from disclosing any details of the proposals received. General service concepts and parameters are discussed below to help guide higher level policy decisions and to frame a later discussion of the proposed Riverfront Shuttle.

### **Pilot 2 Service Concepts**

The Pilot Flexible Transportation Service is envisioned to provide an on-demand, right-sized ridesharing/microtransit alternative that would connect users to core transit lines, multi-modal mobility hub locations, and key destinations throughout the City. Additionally, the innovative service should be applied in such a way that it complements core transit routes, while providing a potential replacement for parts or all of existing inefficient routes.

In order to achieve these goals, key policy decisions related to the service model of the Pilot should be reviewed and discussed by Council. At this stage, staff is requesting that Council provide input on key factors and considerations deemed critical to achieving the City's goals, including:

- Service Coverage (Geographic Extent)
- Target Demographics
- Key hubs, destinations, and connections
- Level of Subsidization, if any
- Fare Structure, if any
- Relationship with Riverfront Shuttle (Discussed below)

Included as **Attachment 1**, three (3) high level service model concepts are submitted for Council's consideration. These concepts are non-exhaustive and are intended solely to frame a broader discussion of the Pilot goals and objectives, as well as to illustrate staff's recommendation relative to alternative service models. A detailed service plan/design will be developed and presented at a later date.

***Staff Recommendation on Pilot 2 Flexible Transportation Service Model Concept***

Staff recommends a “Southport Connector” that would provide curb-to-curb service within the Southport zone, and curb-to-hub service to/from Southport and key destinations or hubs in the North. The “Southport Connector” concept is intended to eventually replace all or part of Routes 35 and 39, pending additional studies of ridership during initial project development. Using the Southport Connector concept as a starting point, this initial pilot could then educate and help inform later service expansions, which could strategically target low-income Seniors who are currently unable to use existing bus services.

By replacing costly fixed routes with the demand responsive microtransit service, local TDA funds could be reallocated to sustain the Pilot beyond one (1) year (pending performance) and to enhance services in transit dependent neighborhoods. At this stage, Council support for the “Southport Connector” concept is intended only to provide high-level policy guidance to staff and will not define actual boundaries, hub locations, or specific service details, nor will it preclude expansion or modification of service should Council redirect staff at a later date.

Staff will return to council to request authorization for funding and award of contract in October. Pending project kickoff, staff will then return again in late Winter for Council’s feedback and approval on the details of an actual service plan. Post-deployment, staff will closely monitor pilot performance and return to Council with quarterly status reports, at which time service modifications or expansions to accommodate new or changing demand patterns can be made.

Staff is not recommending a “Citywide Connector” or “Citywide & Sacramento Connector”, as providing city-wide, on-demand curb-to-curb service would be cost prohibitive for a Pilot; VMT may increase unless a system is in place to require shared rides; and ridership on core fixed routes would likely be undermined, including the Downtown Shuttle or potential Riverfront Shuttle, resulting in degraded service for transit dependent riders. These concerns would be further amplified by crossing into Downtown Sacramento.

***Pilot 2: Potential Costs, Funding & Resources***

Given the highly scalable and adaptive nature of the Pilot 2 service, estimated costs to provide on-demand mobility service to part or all of the City varies significantly. Staff anticipates that could range from \$300,000 to \$750,000 and would include all work and components necessary to plan, design, launch, operate, maintain, market, and evaluate the 1-year Pilot, and potentially including the provision of vehicles, drivers/operators, hardware, software, app development and advertising. A number of scalable factors contribute to the wide range in potential costs, such as the Pilot’s service area, hours of operation, number of dedicated vehicles and drivers, level of subsidy, or fare structure and integration.

Per Council’s approval, staff proceeded with submitting an application in late June to the SACOG TDM Innovations Grant Program requesting \$150,000.00 in federal CMAQ funding to support the Pilot 2 Flexible Transportation Service. If successful, the City would be required to contribute a minimum 11.47% local match. SACOG will announce funding awards in late August.

In addition, SACOG contacted City staff to discuss potential technical assistance for Pilot 2 through their new “Civic Lab Initiative”, which brings in national and local experts to create actionable products over a 6-14 month process for smart mobility projects like ours. Staff will continue to coordinate with SACOG staff to identify additional resources.

On April 19<sup>th</sup>, Council indicated that reserved TDA funds may be available to support implementation of the MAP Transit Pilot projects, including Pilot 2 and the proposed Riverfront Shuttle. The City currently maintains a balance of \$4.4 million in unencumbered TDA funds. Pending Pilot performance, additional TDA funding could become available to support the Pilot by reducing/eliminating Routes 35 and 39. Long-term, a revenue generating fare structure could be discussed as an additional funding source.

Subject to the framework adopted by Council for Measure E, staff has also coordinated with the City Manager’s office on how Pilot 2 could help to implement Smart Cities/Age-Friendly initiatives and potentially utilize associated Measure E funding to achieve common goals. Per Council’s direction, staff will also continue close monitoring of the SB1 transit funding availability to support mobility projects.

At this time, Council is requested to tentatively authorize staff’s use local funds, not to exceed \$750,000 (including any grant funds received), as described above or as otherwise directed by Council and pending the award of SACOG grant funding, and direct staff to coordinate with Finance on a funding plan to present alongside a request for award of contract in Fall.

### **Proposed Riverfront Shuttle**

After receiving staff's presentation on April 19, Council further directed staff to explore and implement a Riverfront Shuttle to serve the transit oriented developments in the Riverfront District, which currently lack essential transit amenities to alleviate parking demands and auto-dependency in the area. Council also directed staff to consider the use of TDA funds to support the service and to return to Council for authorization after identifying the associated cost of a Riverfront service.

At this time, staff has identified three (3) potential alternatives for moving forward with the Riverfront Shuttle. Staff respectfully requests that Council provide further direction to staff on their preferred approach based upon the primary goals of the Riverfront Shuttle, as described below.

#### **Approach A: Traditional Transit Service Deployment (YoloBus)**

Per Council direction, Staff met with YCTD to begin coordinating the rapid deployment of a circulator for the Riverfront District. From these preliminary meetings, YCTD staff produced multiple high-level service alternatives and cost estimates which would leverage their existing contract with Transdev to operate smaller vehicles on a loop. Approach A may provide the most expedient timeline to deploy a basic circulator service. If Council preferred this option, staff would coordinate with YCTD and return on August 16<sup>th</sup> with detailed cost estimates and service alternatives for review and approval.

#### **Approach B: Integrate Riverfront Shuttle with Pilot 2 Flexible Transportation Service**

As discussed above, the Pilot 2 Flexible Transportation Service will connect residents to key hubs and destinations within the City, which could include the Riverfront District and the Downtown Shuttle (**See Attachment 1**). Pilot 2 is intended to be a highly flexible and adaptive service that responds to demand, and could be recalibrated throughout the life of the 1-year Pilot to add or remove service to support efficient operations. For Approach B, staff proposes that Pilot 2 could meet the needs of a Riverfront Shuttle while also serving other parts of the City, and that the Riverfront Shuttle could therefore be absorbed into Pilot 2 to deploy a single service.

Approach B provides an innovative, efficient and plausibly cost-saving option to provide the Riverfront District service in less than a year by meeting the needs of two projects in one. Integration with Pilot 2 could also help to reduce confounding factors during the Pilot's performance evaluation. However, Approach B would push Riverfront District service out to Spring 2018, when Pilot 2 is anticipated to deploy pending the authorization of funding and award of contract in Fall. If Council preferred Approach B, staff would proceed with the integration of the Riverfront District into the Pilot 2 service planning and design, and would return to Council to workshop the service model details following the award of contract and project kick-off.

#### **Approach C. Pilot 3 Autonomous Riverfront Shuttle**

On July 11, YCTD's contracted transit operator, Transdev, held a demonstration of an autonomous shuttle produced by Easy Mile at Raley Field and requested the City's consideration as a potential mobility solution as West Sacramento's mobility network is advanced. A route operating along 3<sup>rd</sup> street (**See Attachment 2**) was proposed and a high level of interest was spurred around the event, both locally and nationally.

Approach C proposes that, if innovation is the primary goal of the Riverfront Shuttle by way of deploying a driverless shuttle, that a distinct and separate Pilot 3 Riverfront Shuttle be established. This would ensure that the Pilot 2 Flexible Transportation Service schedule proceeds without impact while staff coordinates with appropriate agencies to deploy the driverless vehicle(s).

Approach C offers the most technologically advanced concept for the Riverfront Shuttle, but also presents the most uncertainty due to external processes beyond the City's reach. DMV representatives anticipate regulatory milestones to be achieved in Spring 2018, which are subject to change. Autonomous Vehicles producers do not currently have "street-ready" vehicles. Transdev representatives have stated that they may have a vehicle ready to operate on public roads in less than a year. In addition, secondary technology and infrastructure investments will be required to enable the operations of an autonomous vehicle, the extent and cost of which is currently unknown.

Other challenges that also remain to be solved include insurance and liability, monitoring rider behavior, and fleet storage, cleaning and maintenance. This approach could also necessitate a competitive solicitation, which would require adequate staff time to conduct sufficient research and consultation to develop credible cost estimates and a quality scope of work for inclusion in an RFP.

If Council prefers Approach C, staff would work diligently to develop and deploy an Autonomous Riverfront Shuttle at the soonest date possible. Staff will continue to coordinate with regulatory officials and vehicle providers, conduct further research, and to return to Council at a later date to present updates and findings related to regulations, costs, timing, and supplementary infrastructure needs.

#### **Staff Recommendation on Riverfront Shuttle**

At this time, staff recommends proceeding with "Approach B" to integrate the Riverfront Shuttle with the Pilot 2 Flexible Transportation Service, with the intent of earnestly pursuing "Approach C" Pilot 3 Autonomous Riverfront Shuttle as soon as feasible, pending regulatory and other milestones discussed above.

Approach B would ensure near term service to the Riverfront District while also providing the City with the flexibility and adequate time to rigorously pursue an autonomous vehicle pilot. Approach B also provides network efficiency, cost-effectiveness, innovation, and certainty of schedule. Under this approach, Pilot 2 service would connect to key stops within the Bridge District and Washington District beginning next Spring.

Due to the highly adaptive nature of the pilot, service could be modified or removed at any time to better complement a future autonomous Riverfront Shuttle pilot. Further, this approach would allow staff to conduct the appropriate level of due diligence to proceed with the development of a driverless shuttle, particularly surrounding regulations, vehicle costs/availability, safety/liability, and infrastructure needs.

#### **Commission Recommendation**

Due to timing constraints related to the Pilot 2 Flexible Transportation Service procurement process, staff will be presenting updates on the MAP and related pilot projects to the Transportation, Mobility & Infrastructure commission at its next available meeting.

#### **Strategic Plan Integration**

This project advances the 2017 Strategic Plan Management Agenda item, "Mobility Action Plan."

#### **Alternatives**

The City Council's primary alternatives to the recommended actions are summarized below:

- 1) Receive staff's presentation, conduct workshop, and accept, modify or reject staff's recommendations.
- 2) Elect to not conduct the workshop and provide comment on the recommendations at this time and direct staff to return at a later date with additional information.

#### **Coordination and Review**

This report was completed by the Transportation Division and with review provided by the Finance Department and the City Manager's Office (Smart Cities/Age-Friendly Initiatives). Coordination with YCTD was provided for Pilot 1 and the proposed Riverfront Shuttle.

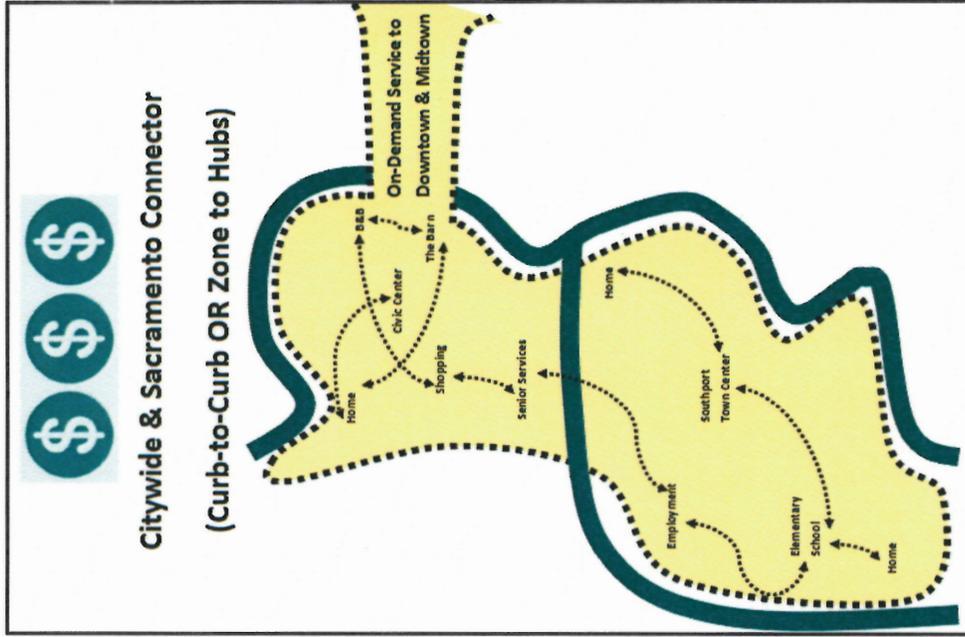
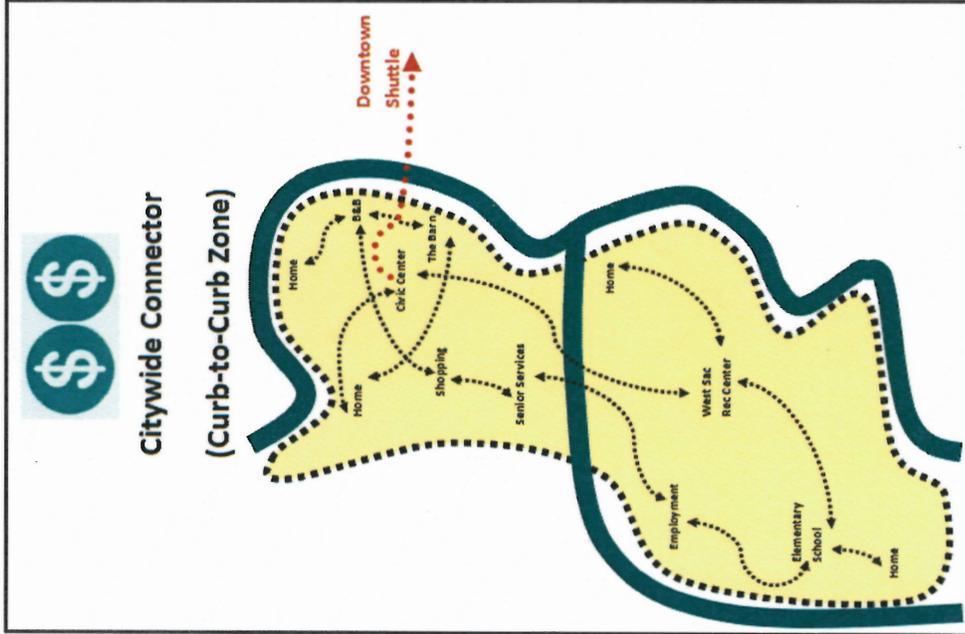
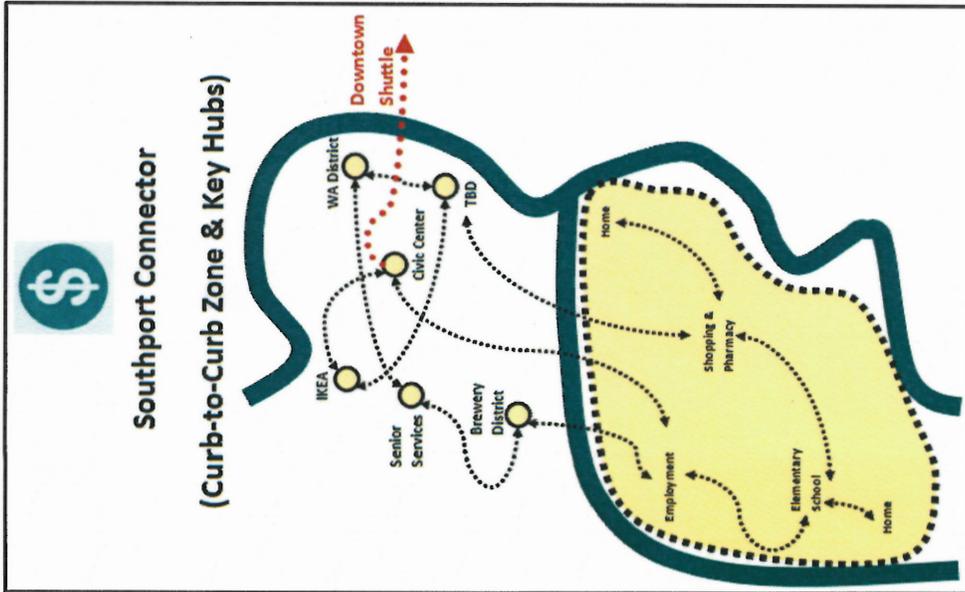
#### **Budget/Cost Impact**

While no immediate costs or budget impacts relate to this workshop, implementation of the proposed recommendations will have cost impacts contingent on Council direction(s) to staff. Subject to Council's action(s), staff will return in October for Council's review and approval of a detailed funding plan to accompany a request for award of contract for the Pilot 2 Flexible Transportation Service.

#### **ATTACHMENT(S)**

- Attachment 1: Pilot 2 Flexible Transportation Service (Model Concepts)
- Attachment 2: Autonomous Riverfront Shuttle (Concept Route)

ATTACHMENT 1 – PILOT 2 FLEXIBLE TRANSPORTATION SERVICE: MODEL CONCEPTS



*NOTE: The concepts shown above are non-exhaustive and are submitted solely to provide a conceptual framework for discussion of the City's key goals and objectives of the Pilot 2 Flexible Transportation Service. Actual service design will be developed at a later date and presented to Council at that time for additional feedback and approval, pending an award of funding and contract for services.*

<b>Southport Connector</b>	<b>Citywide Connector</b>	<b>Citywide &amp; Sac Connector</b>
Curb-to-curb, on-demand microtransit service in Southport zone connecting to key hubs and destinations in the North (ie - Riverfront District, Civic Center). Eventually replaces part(s) or all of Routes 35 and 39 to better feed core transit, including the Downtown Shuttle. Hubs could be stationary stops or geo-fenced zones containing multiple city blocks.	Curb-to-curb, on-demand microtransit service in all urbanized areas of the City. Feeds ridership on Downtown Shuttle and could replace part(s) or all of Routes 35 and 39, but also may compete with existing transit ridership and degrade service on Northern trunk lines. Additional service coverage increases costs due to additional drivers, vehicles, etc. to match demand.	Curb-to-curb, on-demand microtransit service in all urbanized areas of the City and connecting to limited areas or destinations in Sacramento. This model is more oriented toward a revenue-dependent service that requires competing with transit along higher density corridors where demand is greatest. Requires highest costs and additional coordination with Sacramento.

