ALAMEDA COUNTY TRANSPORTATION COMMISSION

2016 Countywide Transportation Plan Update

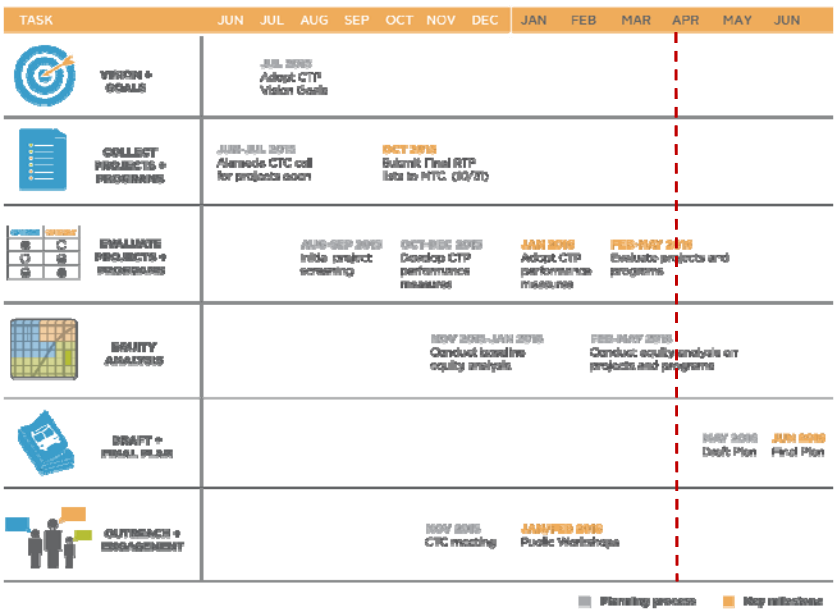
Financially Constrained Plan and Performance Results

ACTAC Meeting
April 7, 2016

Presentation Overview

- Progress on CTP development
- Technical evaluation approach and context
- Financially constrained list
- Performance results for the 2016 CTP
- Next steps

2016 Alameda Countywide Transportation Plan (CTP) Schedule



Performance-Based Planning for CTP

Strategic Direction
- Vision and Goals
- Performance Measures

Analysis
- Collect projects and programs
- Baseline evaluation to understand trends
- Evaluate project/program progress towards goals

Post CTP
- Programming
- Implementation
- Monitoring

ALAMEDA COUNTYWIDE TRANSPORTATION PLAN

Vision and Goals

Alameda County will be served by a premier transportation system that supports a vibrant and livable Alameda County through a connected and integrated multimodal transportation system promoting sustainability, access, transit operations, public health, and economic opportunities.

This vision recognizes the need to maintain and operate our existing transportation infrastructure and services while developing new investments that are targeted, effective, financially sound, and supported by appropriate land uses. Mobility in Alameda County will be guided by transparent decision making and measurable performance indicators and will be supported by the goals below.

The Alameda County transportation system will be:

- ACCESSIBLE, AFFORDABLE AND EQUITABLE for people of all ages, incomes, abilities and geographies
- INTEGRATED with land use patterns and local decision-making
- CONNECTED across the county, within and across the network of streets, highways and transit, bicycle and pedestrian routes
- MULTIMODAL
- COST EFFECTIVE
- SAFE
- RELIABLE AND EFFICIENT
- WELL MAINTAINED
- SUPPORTIVE OF A HEALTHY AND CLEAN ENVIRONMENT

Performance Measures

- **Transit Use & Active Transportation**
  - Transit & active transportation mode share
  - Transit ridership (passengers per revenue hour)
- **Connectivity & Safety**
  - Network connectivity by mode
  - Pavement Condition Index (unmet maintenance needs)
  - Safety (rate of injury/fatality crashes)
- **Economy, Jobs, & Access***
  - Employment accessibility (jobs accessible by 30-minute drive or 45-minute transit trip)
  - Equitable transit availability (% low-income households within 1/4 mile of bus stop, 1/2 mile of rail station)
- **Travel Efficiency**
  - Network congestion
  - Travel time by mode
  - Travel time reliability (peak to off-peak period travel time)
- **Transportation Impacts on Environment**
  - Vehicle miles traveled per capita
  - Carbon emissions (GHG emissions)
  - Particulate emissions (PM 2.5)

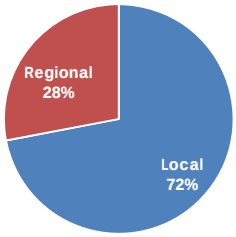
**Note: Activity center accessibility was determined not to be an effective measure because household proximity to activity centers is not an indicator that those activates are appropriate for that household.*

Technical Evaluation Approach

- System-based analysis, not project-by-project
- Two model scenarios:
  - Current Baseline (2015)
  - Financially Constrained/CTP Projects (2040) – Committed projects and CTP projects
- Utilized Alameda County travel demand model and off-model processes:
  - EMFAC 2014 (v1.0.7) (California Air Resources Board) for greenhouse gas (GHG) emissions
  - GIS based analysis

Financially Constrained List

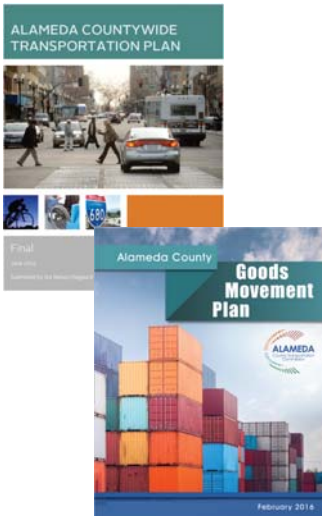
- 332 applications received
  - Total funding request: $21.3 B
  - Alameda County request: $9.5 B
  - Funded through:
    - Local funds (Measures B/BB, VRF): $6.8 B
    - Regional fund allocation: $2.7 B



- Re-affirms list adopted October 2015
  - All projects remain in CTP
- Submitted to MTC October 30th

New Paradigm of Planning

- Started with 2012 CTP
- Transformative transportation planning initiatives, e.g. modal plans
  - Performance-driven
  - Integrated, network-based, multimodal approach
  - Incorporates strategic smart growth and complete streets concepts
  - Identifying new projects
- Technology is changing how people travel
- New tools will change how evaluations occur over time



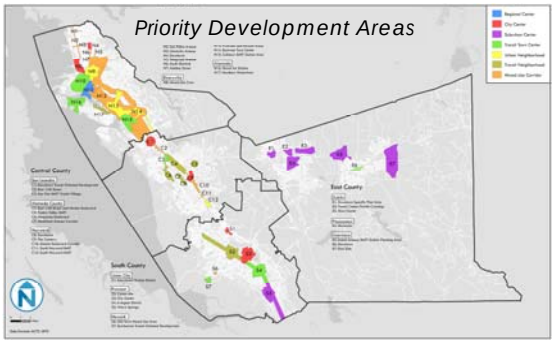
Future CTP updates

- Initial analysis shows that new planning initiatives should have big impacts
- Not yet captured in CTP projects/programs

Results

Context for Interpreting Results

- Modal plans and other transformative planning work not yet captured
- Major growth is projected
- Mature transportation system and built environment
- Travel demand model doesn't fully capture programmatic investments



Results Overview

- Most results trending in the right direction, esp.
  - Non-auto mode share
  - Transit ridership
  - Non-auto network connectivity
  - Job access by transit
- VMT and emissions also decline
- Mixed results for system efficiency, due to projected population and employment growth
- CTP investments and more efficient land use patterns moderates impacts of this growth

Results Overview: Categories

- Transit Use & Active Transportation
- Connectivity & Safety
- Economy, Jobs, & Access
- Travel Efficiency
- Transportation Impacts on Environment

Transit Use & Active Transportation

✓ **More people biking, walking, and taking transit**

- Non-auto mode share (all trips) increases 4% (to 23%)
- Bus ridership increases 72%
- Transit efficiency increases (46 to 52 passengers/hour)

- Reflects significant increase in transit service and bike facilities



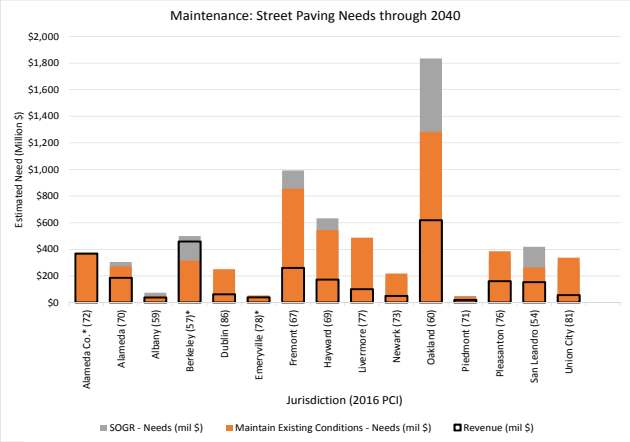
Connectivity & Safety

✓ **Network connectivity improving**

- Up to 43% increase in miles of bicycle facilities
  - Implementation of local bike plans and major regional trails
- Higher frequency transit service nearly doubles
  - Measured for < 30 min frequency
  - $1B service augmentation funded through Measure BB

Connectivity & Safety

- ✓ **Significant maintenance needs projected**
- Funding shortfalls in many communities



*MTC revenue estimates are preliminary and will be updated pending collaboration with jurisdictions.

Connectivity & Safety

- ✓ **Safety expected to improve**
  - Based on VMT per capita going down
- Additional safety improvements planned that are not captured by model

Economy, Jobs, Access

✓ **Access to jobs improves, especially for transit riders**

- Employment accessibility
  - Increases 7% by auto
  - Increases 49% by transit
- Reflects:
  - Transit service increases
  - Future land use changes:
    - Significant growth in jobs
    - Growth is transit-oriented

Economy, Jobs, Access

✓ **Access improves significantly for transit-dependent populations**

- A higher number of low-income households are expected to have access to higher frequency service in the future.

Travel Efficiency

- ✓ **Congested roadways projected to increase; only minor increases in travel time**
  - 7% increase overall
  - ~20% of congested lane miles on arterials
  - ~80% of congested lane miles on freeways
- Auto travel time projections
  - Increase by average of 2 min. in peak
  - Increase by average of 1 min. in off-peak
- Transit travel time projections
  - Increase by on average 2 min. in peak
  - *Decrease* by on average 1 min. in off-peak
- Reliability (peak/off-peak) worsens slightly

Impacts on Environment

- ✓ **VMT and emissions decreasing, esp. greenhouse gas emissions**
- Decrease in
  - Vehicle miles traveled (VMT) per capita
  - Carbon emissions (CO_2)
  - Particulate emissions (PM 2.5)
- Reflects
  - Major population and job growth
  - Fuel efficiency improvements

Visionary Modal Plans continue to improve system performance

- Goods Movement Plan
  - Elimination of 21 million truck vehicle miles traveled (VMT) per year.
  - Elimination of more than 1,280 truck trips per day on I-580 and I-880.
- Transit Plan
  - Doubling of daily passenger trips
  - Over 40% increase of households within half mile of transit stops
  - Over 50% increase in number of jobs located within half mile of transit

Visionary Modal Plans continue to improve system performance

- Multimodal Arterial Plan
  - Connected and continuous network to support all modes
  - Coordinates with and supports Transit Plan and Goods Movement Plan
  - Proposes initial multimodal improvements over 500 miles of major arterials, e.g.
    - Dedicated transit lanes
    - Protected bicycle lanes
    - New sidewalks/crosswalks
    - Advanced ITS strategies

Next Steps

- May 2016: Draft CTP
- Summer 2016: Finalize two remaining modal plans
- Success in future requires:
  - Project development for modal plans
  - Strengthened partnerships (existing and non-traditional)
  - Implementation of complete streets policies (through grant and DLD programs)
  - New ways of integrating projects with programs and policies
  - Piloting and embracing technological innovations