



ALAMEDA COUNTY TRANSPORTATION COMMISSION

## 2014 Performance Report:

State of the Transportation System in Alameda County

A presentation to the Planning, Policy, and Legislation Committee  
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 May 2015

## Purpose of the Performance Report

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- Monitor trends in measures from adopted plans
  - Countywide Transportation Plan
  - Countywide Multimodal Plans
  - Congestion Management Program statute
- System-level, annual monitoring
- Fiscal Year 2013-14 (FY2014) or most recently available data

## Scope of the Performance Report

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### Commute Patterns

General population and employment trends  
Commuter flows  
Commuter travel time  
Commuter mode share



### Roadways

Gateway traffic volumes  
Freeway speed and delay  
Local road pavement condition  
Collisions



### Transit

Ridership  
Service utilization  
Cost-effectiveness  
Service interruptions & fleet age  
On-time performance & speed



### Paratransit

ADA ridership  
ADA trip distance and duration  
ADA on-time performance  
ADA cost efficiency  
City-based paratransit



### Bicycling and Walking

Counts  
Collisions  
Network/project completion from local jurisdiction summaries  
Master plan completion  
Program participation



### Liveable Communities

Housing production  
Development approvals  
Travel Demand Management Policies (report only)

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## Key Findings

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- Continued economic recovery has led to population and job growth in Alameda County and regionally.
- Other large Bay Area counties have added more total jobs and more jobs per new resident since 2010 than Alameda County, exacerbating regional jobs-housing imbalances.
- Alameda County residents' commutes became more regional (more workers "exported"), longer, and more multimodal between 2005 and 2013.
- Productive economy led declines in freeway speeds and 15 percent increase in "severe" freeway delay over previous year.

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## Key Findings, cont.

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- Transit ridership increases for the third consecutive year, but bus operators still below pre-recession levels.
- BART saw slight dip in ridership last year due to strike days, but has seen ridership and service utilization increases over last decade.
- AC Transit has seen relatively constant service utilization in the last five years, but has experienced steady declines in operating speeds over the last decade.
- 900,000 paratransit rides were taken in FY2014, though this is a decline from a FY2012 peak (which may reflect changes in availability of some social services and other factors).
- Paratransit consumer satisfaction is high.
- Paratransit costs (total and per ride) are rising.

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## Key Findings, cont.

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- Biking and walking counts generally declined in 2013 (from 2012) but this may reflect day-to-day variability and BART strike.
- Biking collisions increased in 2012, but trend in collisions per cyclist less clear. Walking collisions increased in 2012, and Alameda County saw, on average, nearly 2 fatal or injury collisions involving pedestrians per day in 2012.
- Housing permitting has lagged regional housing needs allocations (RHNA) targets, with only one jurisdiction (Dublin) exceeding 2007-2014 RHNA.
- 26 residential projects of more than 50 units approved in FY2014; 17 of these within a half-mile of regional transit.
- 5 non-residential projects of more than 100,000 square feet approved in FY2014; 4 of these within a half-mile of regional transit.

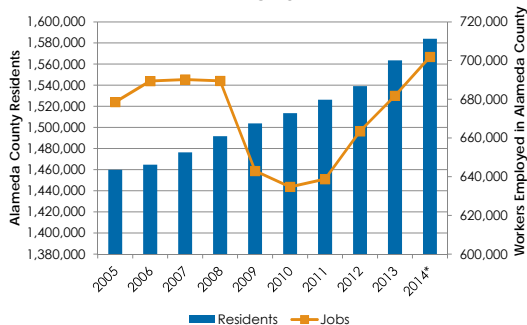
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# Commute Patterns: Population & Economic Trends

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Population and employment grew for fourth consecutive year and are higher than pre-recession levels

**Alameda County Population and Job Trend**



- Population grew steadily in the last decade
- Alameda County had the second fastest population growth in the state and the region in 2014
- Employment topped pre-recession levels and grew for the fourth consecutive year

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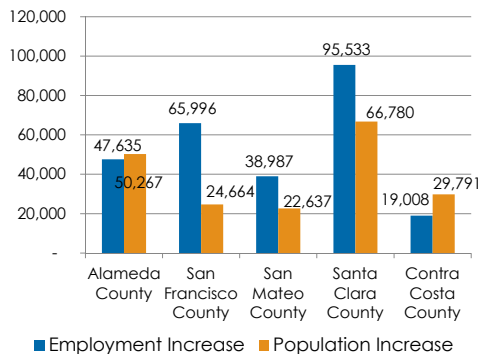
Source: Department of Finance E-2 Report, December 2014 and Department of Finance E-6 Reports  
\*2014 Population Estimate is Preliminary

# Commute Patterns: Population & Economic Trends

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Alameda County added fewer jobs relative to population compared to surrounding Counties

**Employment and Population Growth by County (2010 to 2013)**



- From 2010 to 2013, population and employment increased by around 50,000
- Compared to West Bay counties, Alameda County added fewer jobs relative to its population increase, but overall it was more balanced than all other counties

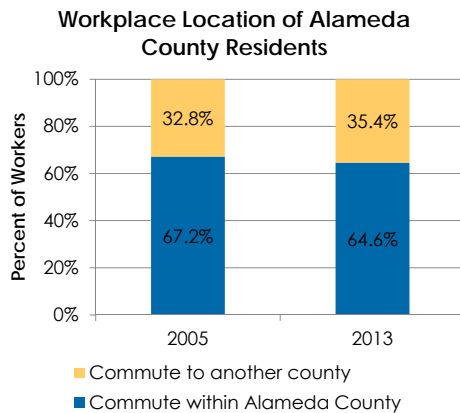
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Source: Employment data from the US Department of Labor, Bureau of Labor Statistics; Population data from the State of California, Department of Finance

# Commute Patterns: Commute flows

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Commuting patterns are becoming more regional



- Increasing job-housing imbalance in surrounding counties lead to more Alameda County workers commuting out of county
- From 2005 to 2013, workers commuting out of county increased by more than 2 percent

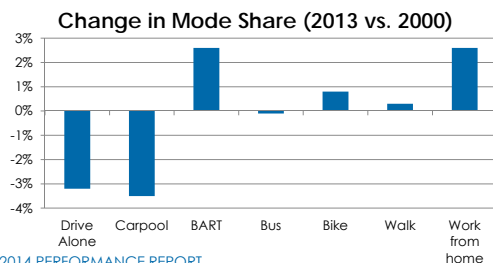
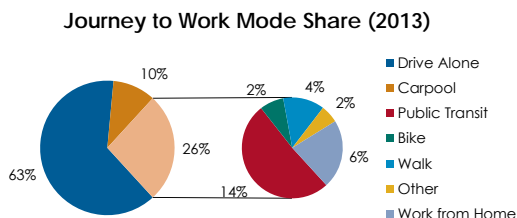
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Source: American Community Survey, 2005 1-Year Estimate and 2013 1-Year Estimate, Table B08007

# Commute Patterns: Commute Mode Share

10

Commuters to work have become more multimodal



- Driving alone and carpool to work have declined several years in a row and are at 63 percent and 10 percent in 2013, respectively
- More than a quarter of residents used a non-driving mode to work
- Transit riders account for more than half of non-driving commutes

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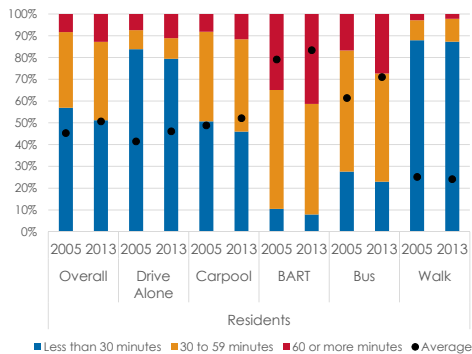
Source: American Community Survey 2013 1-Year Estimate, Table B08006

# Commute Patterns: Commute Travel Time

11

Commute travel time has increased across all travel modes from 2005 to 2013

Average Journey to Work Travel Time of Alameda County Residents



- Overall average travel time increased by about 3 minutes
- Bus commuters saw the largest increase in average travel time (nearly 6 minutes)
- BART commuters face the longest average travel time; more than 40 percent of riders commute more than 1 hour

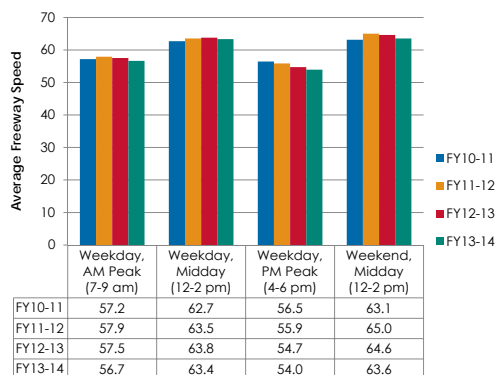
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Source: American Community Survey, 2005 1-Year Estimate and 2013 1-Year Estimate, Table B08007

# Roadways: Freeway Speed & Delay

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Average freeway speed in all time periods declined from FY 12-13 to FY 13-14



- Average freeway speed in all time periods exceeds 50 mph.
- Weekday PM peak hour is the time period with the lowest speed, and has experienced the sharpest drop over the last four years
- Weekday AM peak hour speed has remained around 57 miles per hour

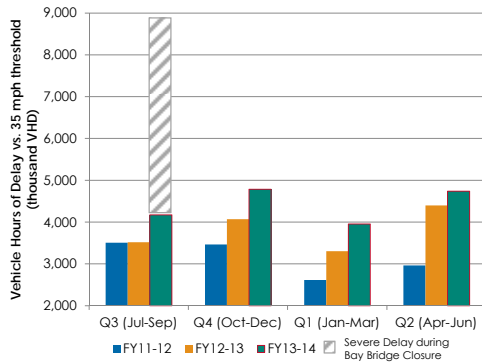
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Source: INRIX – Commercial Speed Data

# Roadways: Freeway Speed & Delay

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“Severe” freeway delay has increased throughout the year from FY 12-13 to FY 13-14



- “Severe” freeway delays is defined as the additional travel time due to roadway operating below 35 miles per hour
- Delay varies seasonally, but increased in all seasons from FY 12-13 to FY 13-14
- The 2013 Labor Day weekend Bay Bridge closure doubled the hours of delay in Quarter 3 of FY 13-14

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Source: INRIX – Commercial Speed Data

# Roadways: Local Pavement Condition

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Local road pavement condition stagnant since 2007



- Pavement Condition Index (PCI), a measure of pavement quality, has remained relatively constant in recent years
- Local street and road PCI was 67 in 2013
- Around 22 percent of local street and road has a PCI of “poor” or “failed,” and additional miles are “at risk.”

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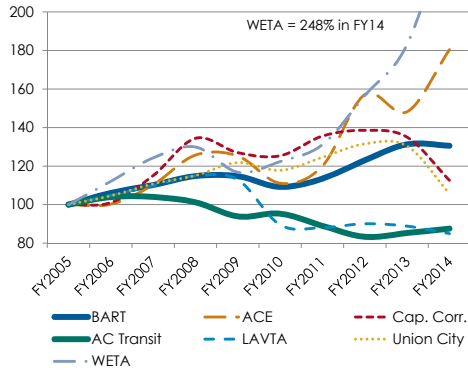
Source: MTC StreetSaver database

# Transit: Ridership

15

Ridership growth for third consecutive year, but total transit boardings below pre-Recession levels

Annual Boardings in Alameda County:  
Percent of 2005 Levels



- BART boardings grew by 30 percent over last decade but slight dip in 2014 (strike)
- AC Transit boardings grew for second consecutive year but still 15 percent below 2005 levels (service restoration planned)
- ACE and ferry saw greatest growth in percentage terms

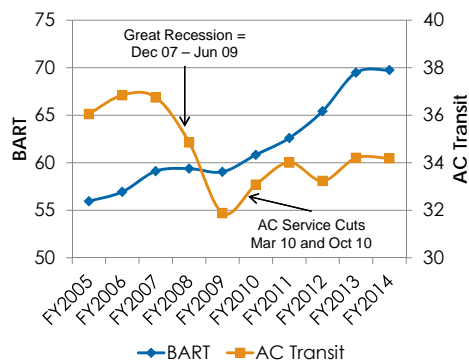
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Source: National Transit Database (FY2005-FY2013), Provisional data from transit operators (FY2014)

# Transit: Service Utilization

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Service Utilization (Boardings per Revenue Vehicle Hour)



**BART Trends:**

- BART now carries nearly 15 more passengers per RVH than in 2014
- Limited ability to add new service until rail cars delivered

**AC Transit Trends:**

- Service utilization relatively flat since 2010
- Reflects service cuts and modest ridership gains

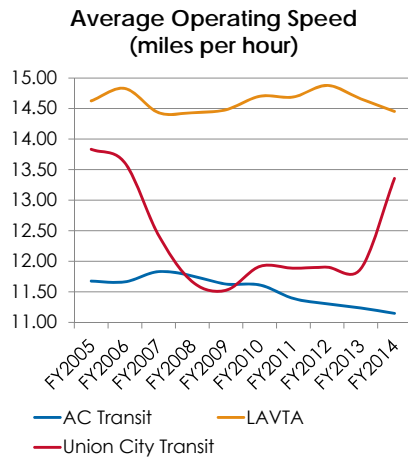
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Source: National Transit Database (FY2005-FY2013), Provisional data from transit operators (FY2014)



## Transit: Bus Operator Speed

17



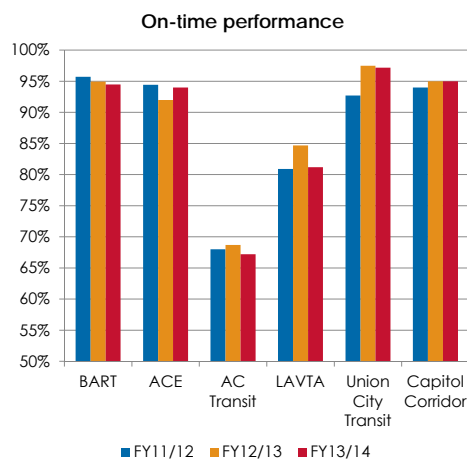
- AC Transit has seen steady decline in average speed – nearly 1 mph since 2007
- Lower operating speeds have implications for passenger experience and operator costs
- Density, stop/signal spacing, and other factors explain differences across operators

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Source: National Transit Database (FY2005-FY2013), Provisional data from transit operators (FY2014)

## Transit: On-time performance

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- BART – very high reliability though slight declines in 2013 and 2014
- AC Transit – overall systemwide average on-time performance less than 70%
- Capitol Corridor, ACE, and Union City Transit all achieve very high reliability

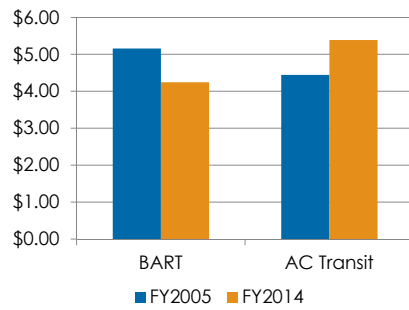
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Source: Transit Operators

# Transit: Cost Efficiency

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Operating Cost per Rider (\$2014)



**BART Trends:**

- Reduction in cost per rider
- Reflects both cost control and ridership growth with minimal added service

**AC Transit Trends:**

- Increase in cost per rider, though relatively flat since 2009
- Cost per rider up nearly a dollar since 2005 (in real terms)

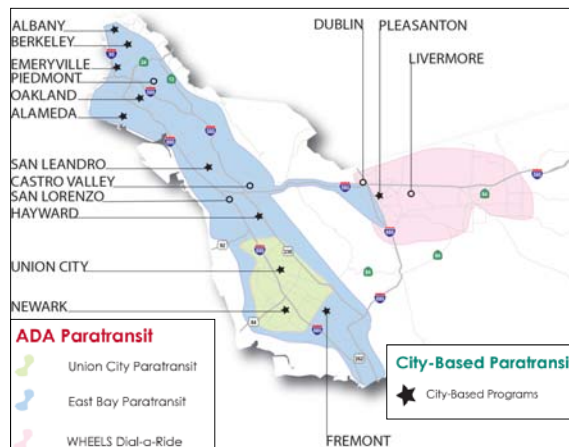
Source: National Transit Database (FY2005-FY2013), Provisional data from transit operators (FY2014)

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# Paratransit Service

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## Paratransit Programs in Alameda County



ADA-mandated service providers in Alameda County:

- East Bay Paratransit (*BART and AC Transit*)
- LAVTA (WHEELS)
- Union City Transit

City-based, "non-ADA" services are also provided

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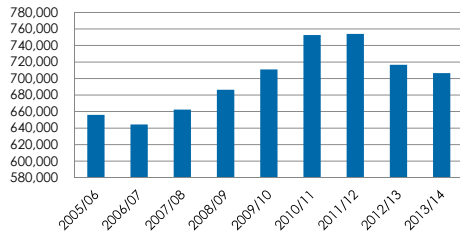
Source: Data from transit operators (FY2005-14)

# ADA-mandated Paratransit: Ridership

21

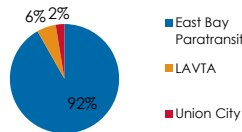
ADA paratransit delivered over 770,000 trips in Alameda County in FY 2014

## East Bay Paratransit Annual Trips

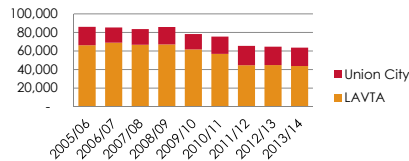


- East Bay Paratransit provided 92% of FY 2014 trips
- Overall ridership decline from peak in FY 2012
- FY 2014 registrants approx. 20,000

## FY 2013/14



## Annual Trips - LAVTA & Union City



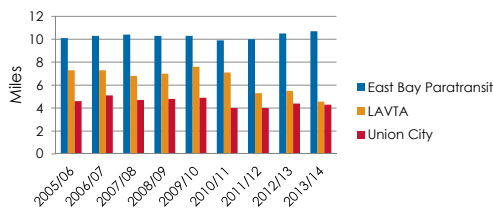
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Source: Data from transit operators (FY2005-14)

# ADA-mandated Paratransit: Trip Distance and Duration

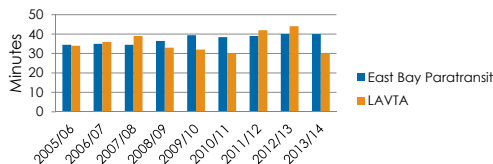
22

## Average Trip Distance



- East Bay Paratransit trips average 10 miles - twice the average distance of LAVTA and Union City trips

## Average Trip Duration



- EBP and LAVTA trip durations average between 30-40 minutes, one-way
- Union City does not track trip duration due to small service area

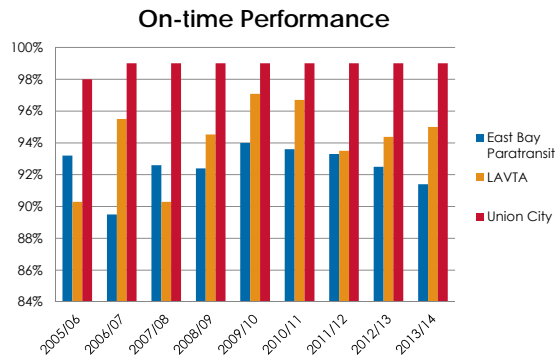
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Source: Data from transit operators (FY2005-14)

## ADA-mandated Paratransit: On-time Performance

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The on-time performance of the largest ADA provider shows a slight decline, but consumer satisfaction remains high



- On-time performance for all providers has been above 90% since FY 2008
- EBP FY 2014 rider survey reports 82% of riders are satisfied or very satisfied with service

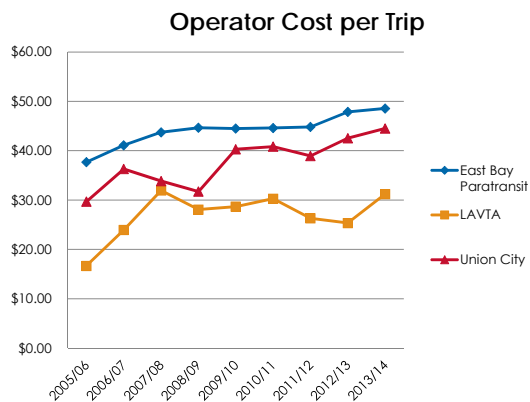
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Source: Data from transit operators (FY2005-14)

## ADA-mandated Paratransit: Cost-efficiency

24

Overall, operator cost per trip continues to rise



- In FY 2014 costs increased for all three ADA providers
- LAVTA changed transportation providers in 2011 and 2014

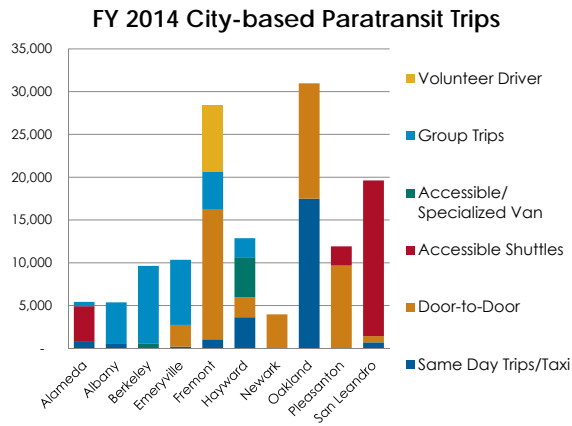
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Source: Data from transit operators (FY2005-14)

# City-based Paratransit: Ridership

25

City-based paratransit programs delivered over 138,000 trips in Alameda County in FY 2014



- Not all trip needs are met by ADA-mandated service
- City-based services also include:
  - Subsidized fares
  - Mobility management
  - Travel training
- City-based trips are increasing; 228,000 planned for FY 2016

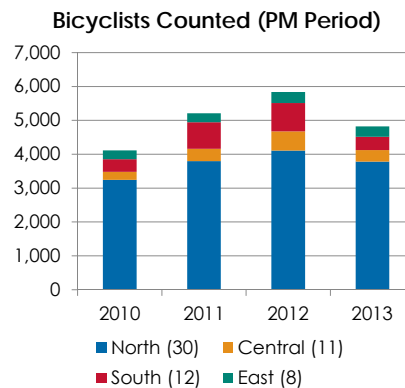
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Source: Data from Compliance (FY2013-14)

# Bicycling: Counts

26

- Bicyclists tallied through Alameda CTC count program declined in 2013 in all time periods
- Drop is inconsistent with Census journey to work bicycling mode share data and may reflect BART strike as well as day-to-day variability
- Data are 1-day, annually conducted manual counts during midday (12 pm – 2 pm), school (2 pm - 4 pm) and PM (4 pm – 6 pm)



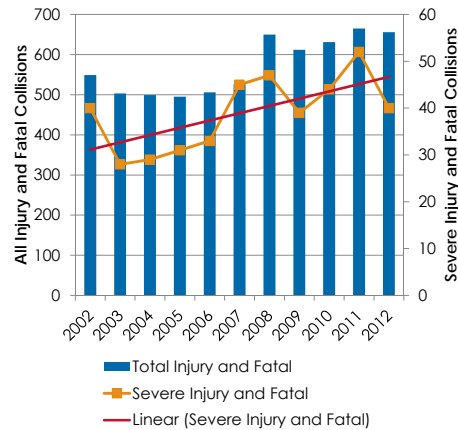
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Source: Alameda CTC Manual Count Program

## Bicycling: Collisions

27

- Collisions involving bicyclists declined slightly in 2012 vs. 2011 (data availability lags several years)
- Over the longer term, collisions involving bicyclists appear to be increasing
- Increases in collisions involving bicyclists may reflect greater exposure from increased bicycling rather than less safe conditions



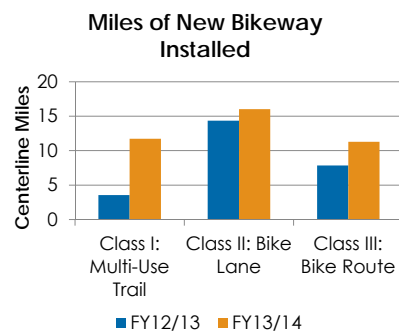
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Source: Statewide Integrated Traffic Record System

## Bicycling: Network Completion

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- Alameda County jurisdictions installed over 40 miles of bikeways in 2014, greatly exceeding 2013's total of 25 miles
- Oakland led jurisdictions in mileage installed with over 20 miles, with Alameda County also topping 5 miles implemented



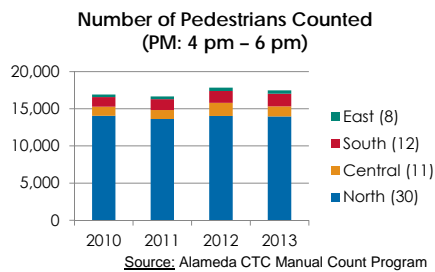
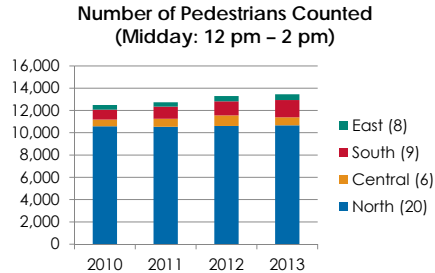
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Source: Reported by Local Jurisdictions

## Walking: Counts

29

- Pedestrians tallied through Alameda CTC count program increased in midday but declined in PM
- PM drop is inconsistent with Census journey to work walking mode share data and may reflect BART strike as well as day-to-day variability
- Data are 1-day, annually conducted manual counts during midday (12 pm – 2 pm), school (2 pm - 4 pm) and PM (4 pm – 6 pm)



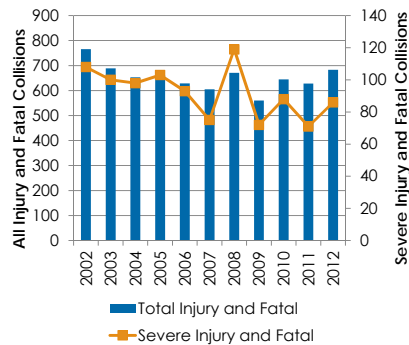
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Source: Alameda CTC Manual Count Program

## Walking: Collisions

30

- Collisions involving pedestrians increased slightly in 2012 vs. 2011 (data availability lags several years)
- Over the longer term, collisions involving pedestrians do not appear to be rising
- On average, nearly two injury/fatal pedestrian involved collisions per day in 2012



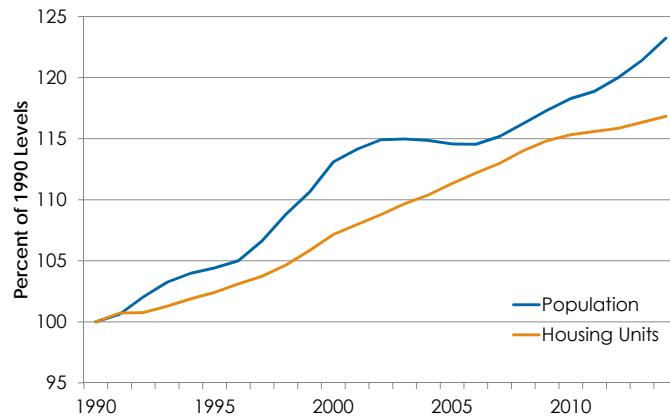
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Source: Statewide Integrated Traffic Record System

# Liveable Communities: Housing Production

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Population growth has outpaced housing production since 1990, resulting in larger household sizes and a tighter housing market



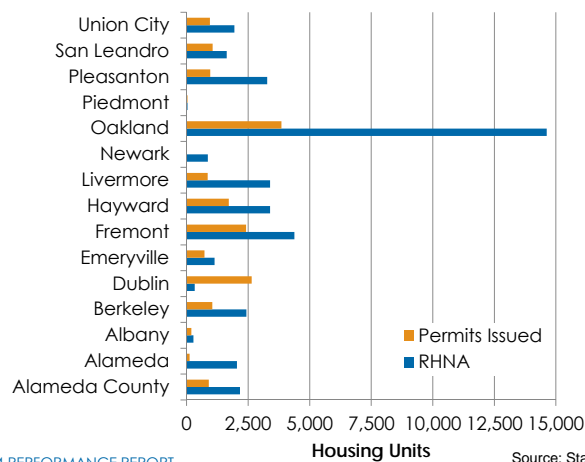
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Source: Housing Element Progress Reports as summarized by ABAG

# Liveable Communities: Housing Production

32

2007-2014 Housing Approvals vs. Regional Housing Needs Allocation Target



Only 7 of 15 Alameda County jurisdictions meet more than 50 percent of RHNA target (2007-2014). Only one jurisdiction exceeded RHNA (Dublin)

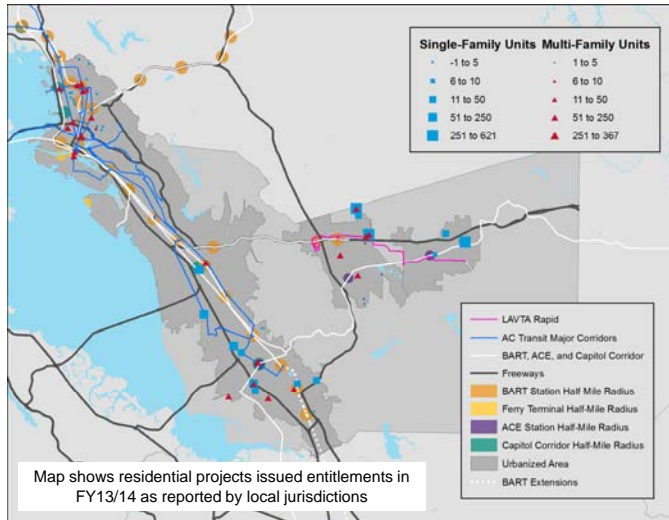
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Source: Statewide Integrated Traffic Record System



# Liveable Communities: Residential Development Approvals

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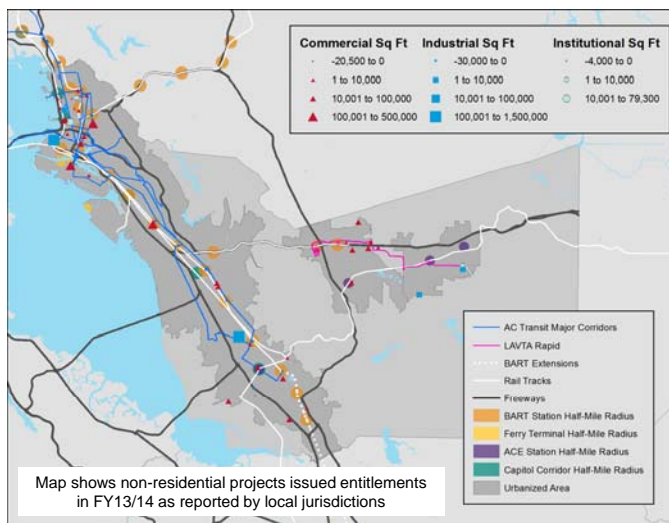
26 residential projects of more than 50 units approved in FY13/14. 17 of these projects located within 1/2 mile of regional transit\*

\* = Rail, Ferry, AC Major Corridors, LAVTA Rapid

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# Liveable Communities: Non-Residential Development Approvals

34



5 non-residential projects of more than 100,000 square feet approved during FY13/14. 4 of these within 1/2 mile of regional transit\*

\* = Rail, Ferry, AC Major Corridors, LAVTA Rapid

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# Questions?

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