Caltrans Sustainable Communities Grant to Southern California Association of Governments Expert Advisory Committee Meeting
February 25, 2022

Caltrans Sustainable Communities Grant to SCAG
Agenda Item I: Welcome and Introductory Remarks
Roland Ok

Caltrans Sustainable Communities Grant to SCAG
Agenda Item II: Overview of Purpose and Focus of Grant
Sunne Wright McPeak

- Assess the potential of broadband—ubiquitous deployment and adoption—to reduce greenhouse gas emissions (GHG).

- Evaluate the relationship between broadband, vehicle trip generation (vehicle miles traveled—VMT), and GHG. Linchpin is vehicle trip reduction.

- Review research and prepare Data and Literature Report.

- Identify strategies to reduce vehicle trips with ubiquitous broadband through: (1) Data Collection; (2) Stakeholder Surveys; and (3) Focus Groups.

- Complete study with Technical Consultants analyses.

Caltrans Sustainable Communities Grant to SCAG
Agenda Item II: Overview of Purpose and Focus of Grant

- 2021 Statewide Survey on Broadband Adoption asked residents about online activities (reduced vehicle trips) during pandemic and preferences going forward: 53% prefer to work remotely 3-5 days per week. However, 57% identified as "essential workers" with less ability to work remotely.
- Stakeholder Surveys probe policymakers' willingness to continue remote working and identify what strategies will help reduce vehicle trips.
- Focus Group Interviews probe low-income residents' ability to reduce trips.
- Public agencies impact ability of low-income resident's to reduce trips.
- All of this data is applied to Regional Trip Inventory to assess potential to reduce overall trips in the region.
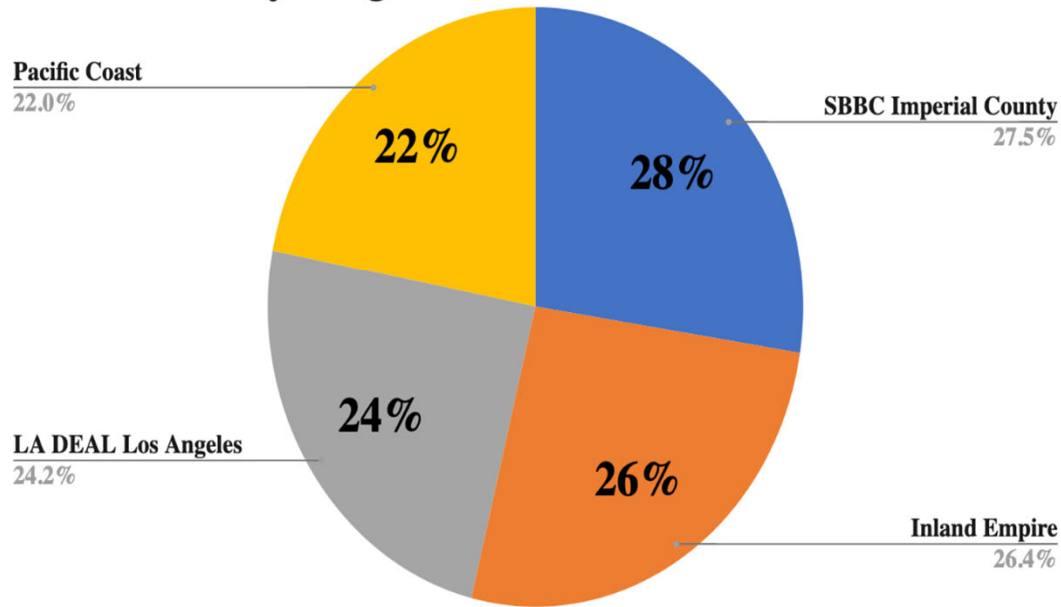- Projected potential trip reduction is basis for GHG reduction.

Focus Group Interviews of Low-Income Residents

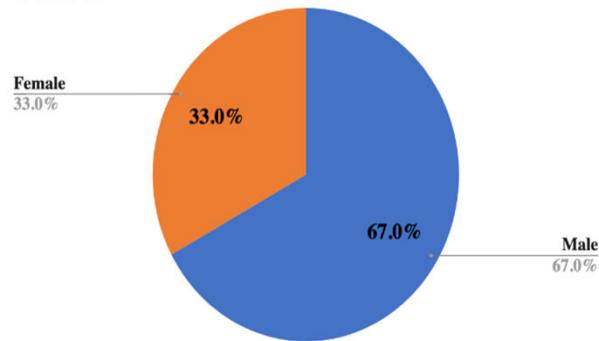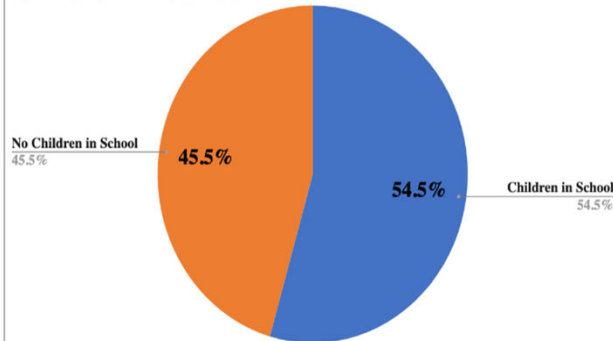# Overview of Geographic Source of Interviews

Interviews by Region

Pacific Coast
22.0%

SBBC Imperial County
27.5%

22%

28%

LA DEAL Los Angeles
24.2%

24%

26%
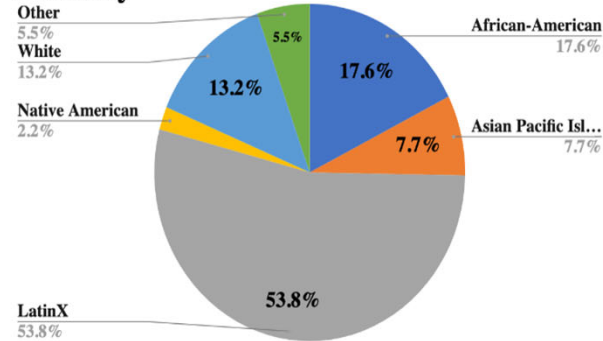
Inland Empire
26.4%

Total Interviews

91

Demographics of Interviewees
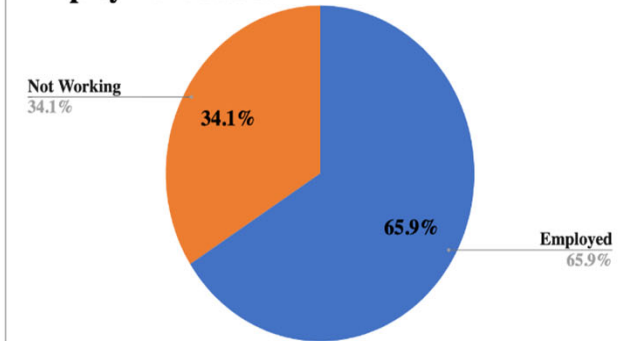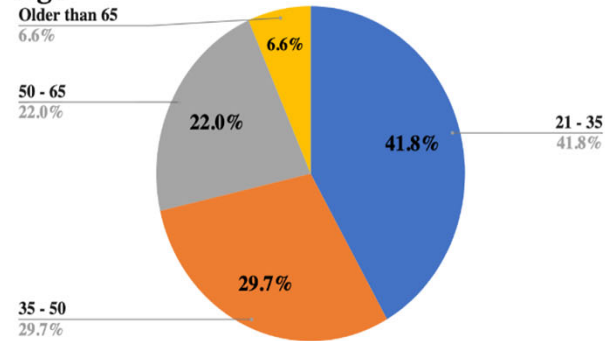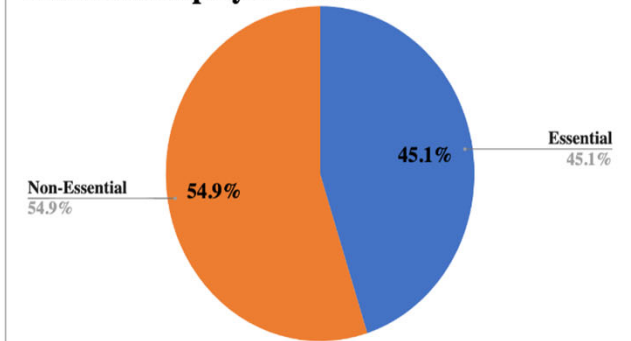
Connectivity and Awareness of Affordable Offers

Connectivity

Connected to Internet At Home	93.4%
Connected by and/or Have a Computing Device	81.3%
Pays More than $25 Monthly	74.7%
Connected by Smartphone Only	15.4%

0.0%   25.0%   50.0%   75.0%   100.0%

Awareness of Affordable Offers

Pays More than $25 Monthly	74.7%
Subscribes to an Affordable Offer	20.9%
Heard of EBB-ACP	19.8%
Heard of ISP Offers	15.4%
Heard of LifeLine	15.4%

0.0%   20.0%   40.0%   60.0%   80.0%
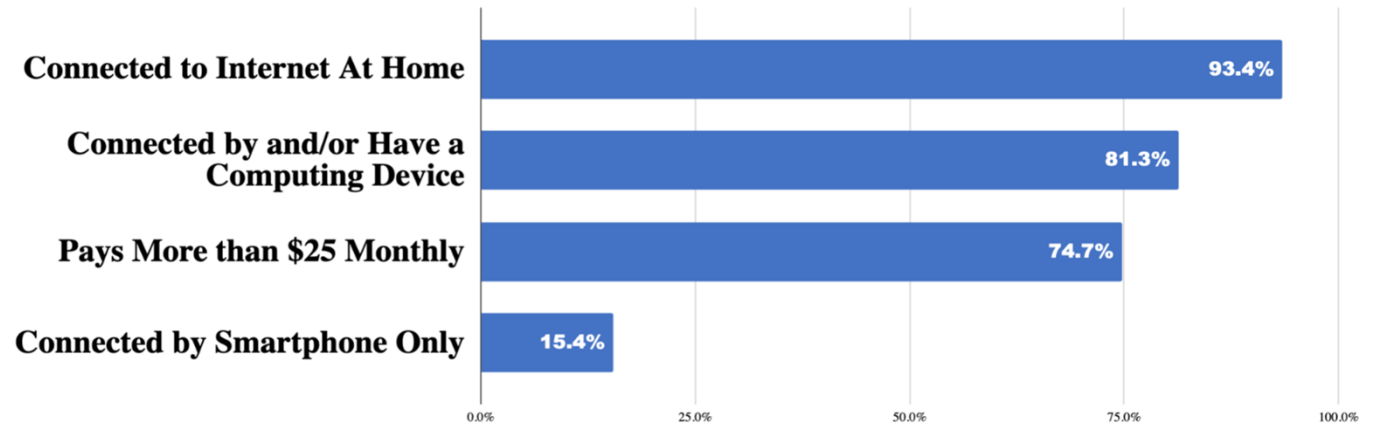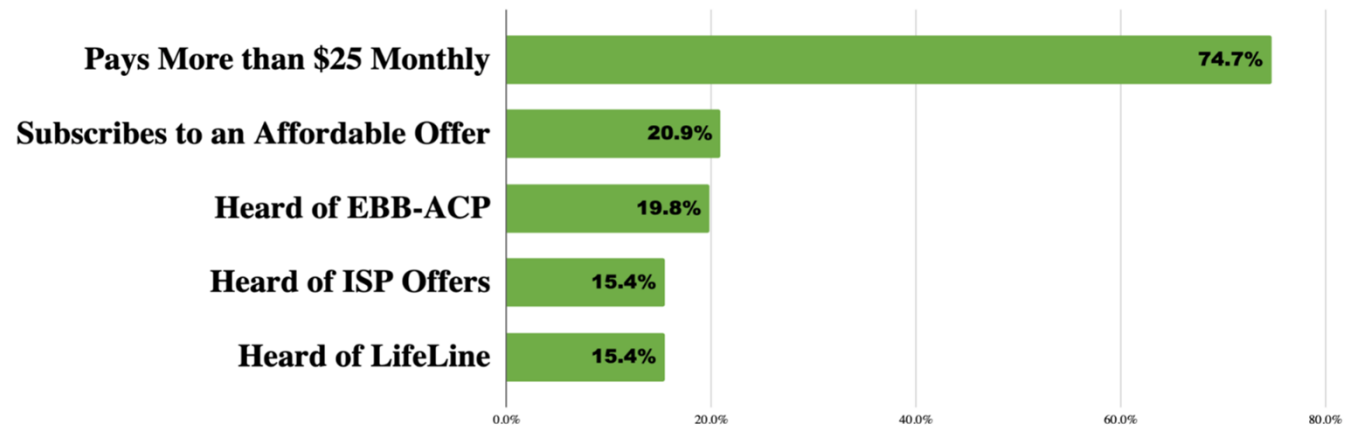
Reasons for Not **Subscribing** to an Affordable Service
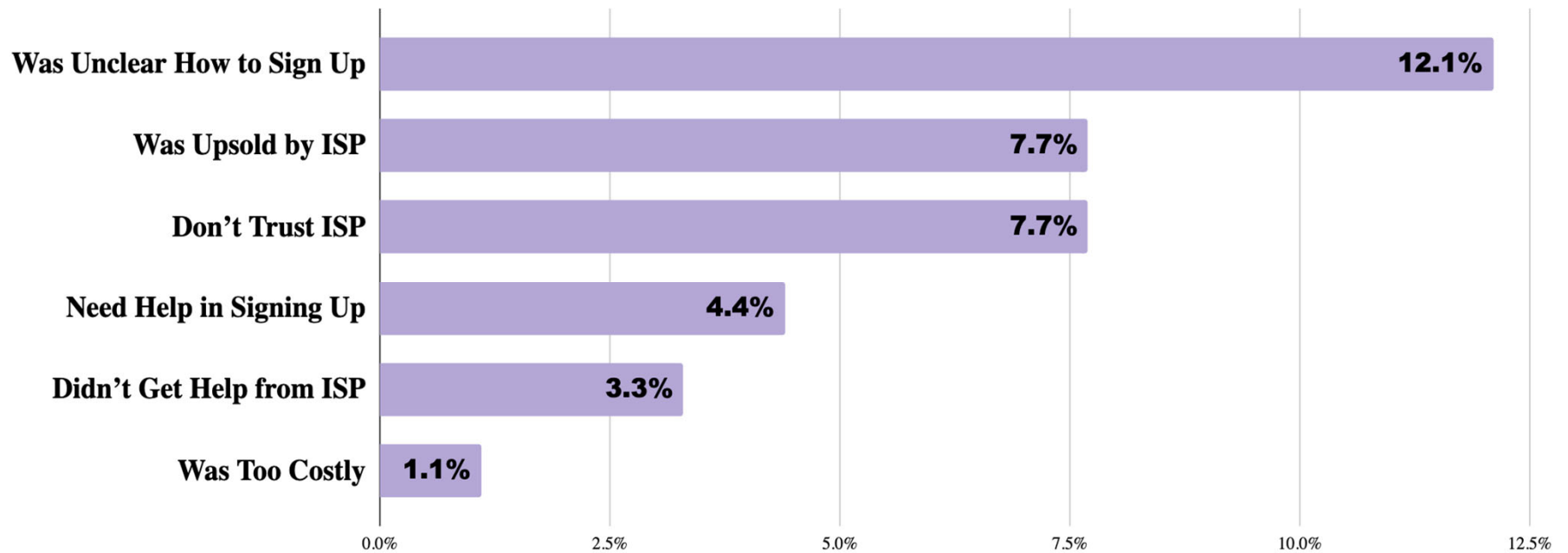
Kinds of Assistance That Would Make it Easier to Connect to the Internet
(Rated 1-5, with 5 Being Most Helpful)

Category	Rating
Affordable Home Internet Service	3.38
Better Home Access (Internet Infrastructure)	3.35
Affordable Computer	1.67
Hotspot	1.48
Training for Family	1.25
Training for Me	0.99

Kinds of Vehicle Trips That Can Be Reduced

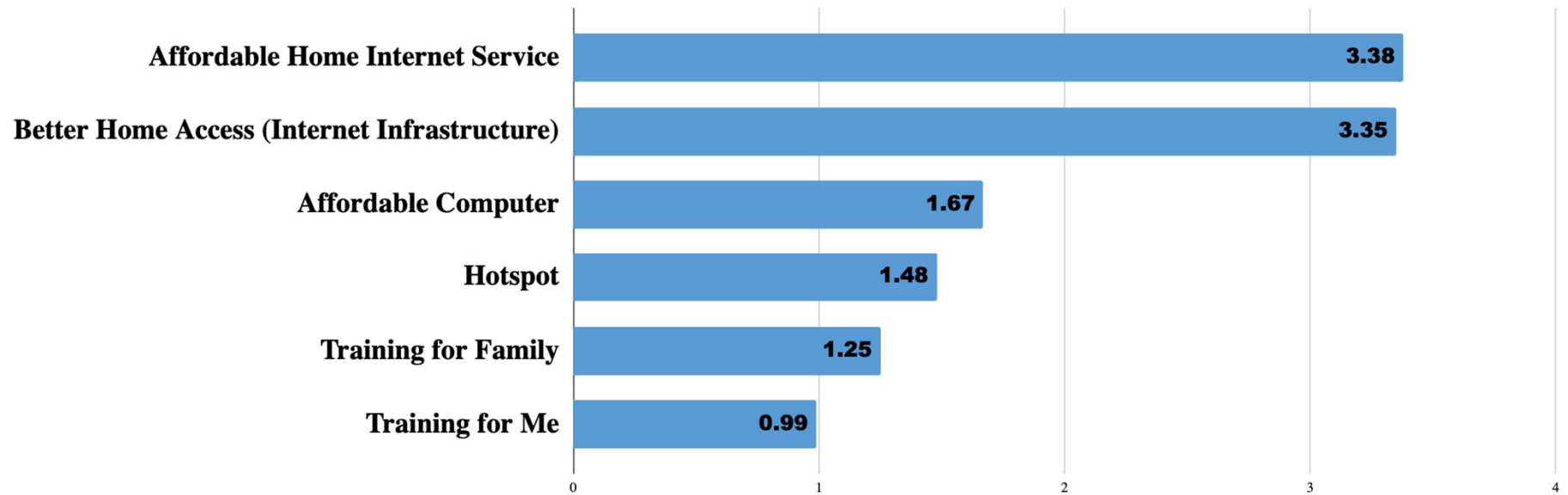| Category	Count	Percent
Pay Bills	64	70.3%
Banking	63	69.2%
Other Shopping	43	47.3%
School or Education	42	46.2%
Health Care (Doctor Visit)	42	46.2%
Grocery Shopping	36	39.6%
Apply for a Job	31	34.1%
Post Office	29	31.9%
Pharmacy	27	29.7%
Go to DMV	27	29.7%
Work	26	28.6%
Library	23	25.3%
Getting Public Benefits	19	20.9%
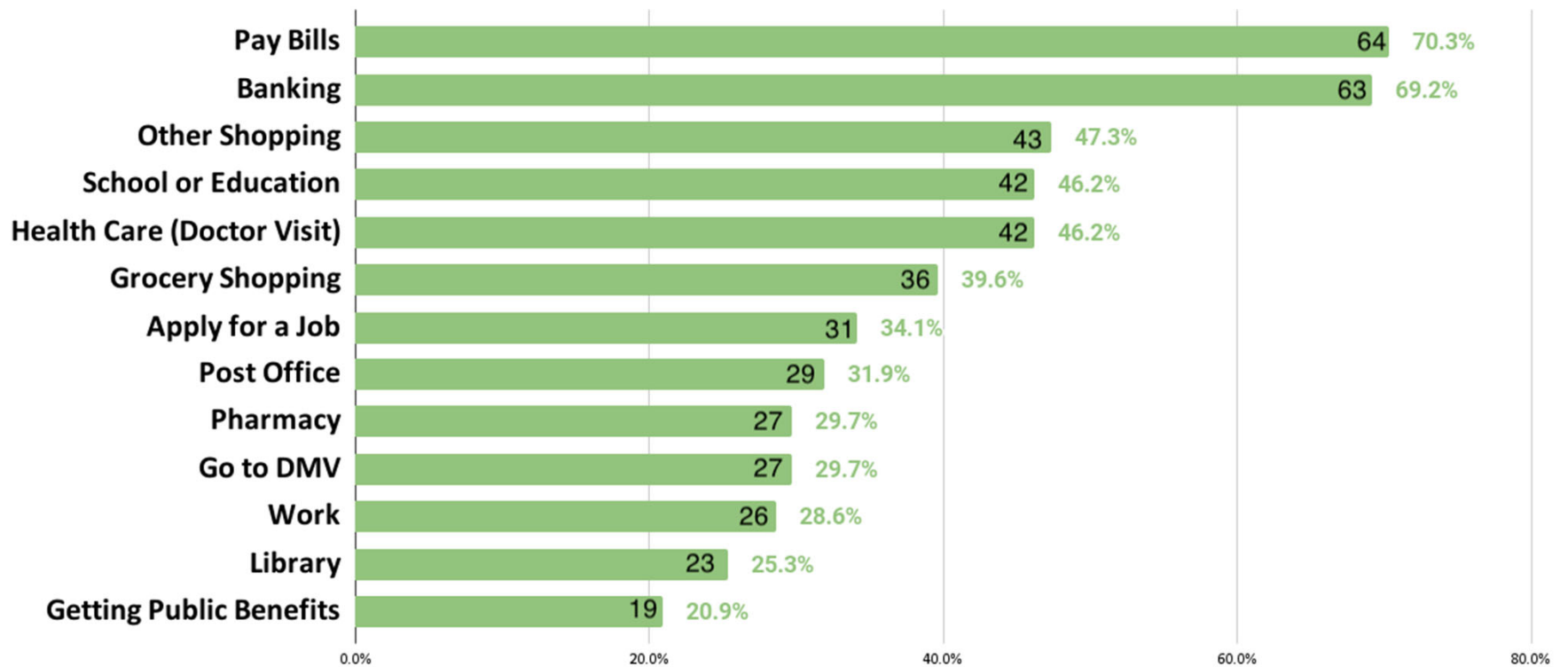
Focus Group Interviews of Low-Income Residents

Agenda Item II: Report on Data Collection
Sulaiman Kenyatta (LA DEAL) and Alessandra Muse (SBBC)

- RBCs reached out to Counties and COEs to obtain data on recipients with email addresses for 3 Big Eligible Populations (12.3M): Medi-Cal; CalFresh, NSLP. USC estimates 2.55M HHs eligible for EBB-ACP.

- Public Agencies generally don't obtain email addresses of recipients and don't communicate online with public assistance HHs.

- Email addresses varies: Imperial County 20%-27%; Inland Empire 1%-18%; Ventura County 41%-52%; Los Angeles County NA.

- Public Agencies could reduce vehicle trips for 50%-80% recipients.

- Public Agencies can be engaged to change policies and practices.

California Lutheran University Report on Digital Divide
Jamshid Damooei, Ph.D.

Caltrans Sustainable Communities Grant to SCAG
Agenda Item III: Update on Regional Trip Inventory
Tom Bellino Report on January 21, 2022

- Analysis of GHG emissions and max theoretical reductions for remote work, learning and services.

- Based on SCAG Activity-Based Model and Census data.

- Reductions vary based on County and sub-region:

  - Highest reduction: Orange County, 44.1%

  - Lowest reduction: Imperial County, 29.7%
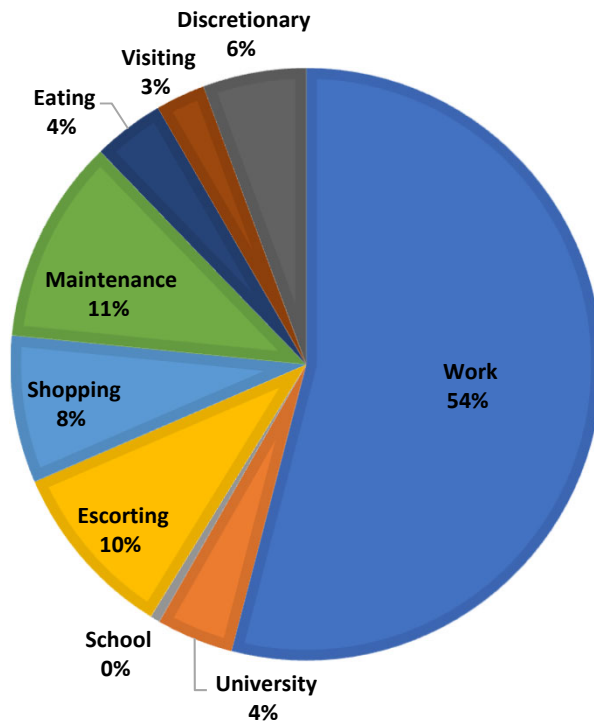
  - Regionwide reduction: 40.1%

Caltrans Sustainable Communities Grant to SCAG
Agenda Item III: Overview of Regional Trip Inventory
Tom Bellino

IMPERIAL COUNTY GHG EMISSIONS

Discretionary 6%
Visiting 3%
Eating 4%
Maintenance 11%
Shopping 8%
Escorting 10%
School 0%
University 4%
Work 54%

ORANGE COUNTY GHG EMISSIONS
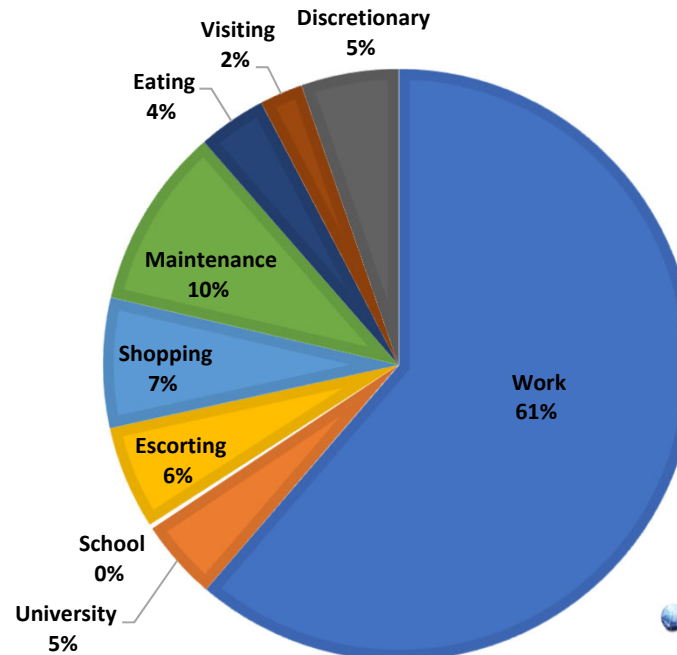
Visiting 2%
Discretionary 5%
Eating 4%
Maintenance 10%
Shopping 7%
Escorting 6%
School 0%
University 5%
Work 61%

Caltrans Sustainable Communities Grant to SCAG
Agenda Item III: Overview of Regional Trip Inventory
Tom Bellino

SCAG REGION EMISSIONS

- Discretionary 6%
- Visiting 3%
- Eating 4%
- Maintenance 11%
- Shopping 8%
- Escorting 7%
- School 1%
- University 4%
- Work 56%

Caltrans Sustainable Communities Grant to SCAG
Agenda Item III: Overview of Regional Trip Inventory
Tom Bellino

GhG Emissions Scenarios by County

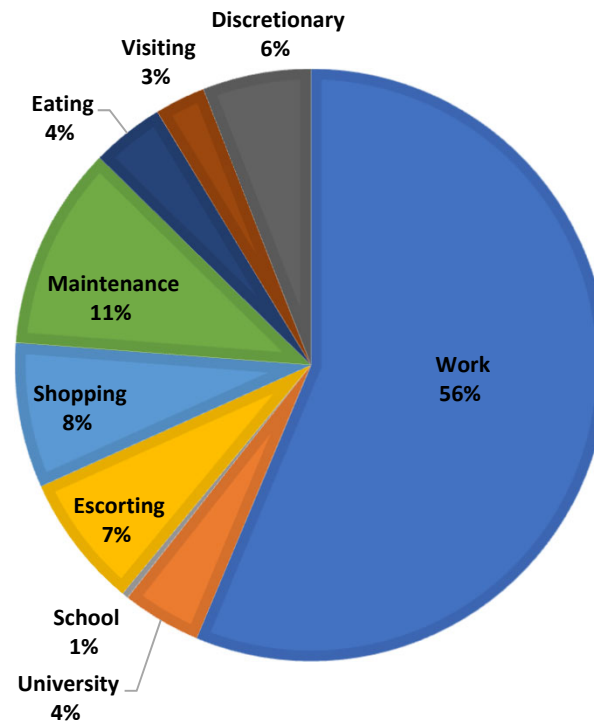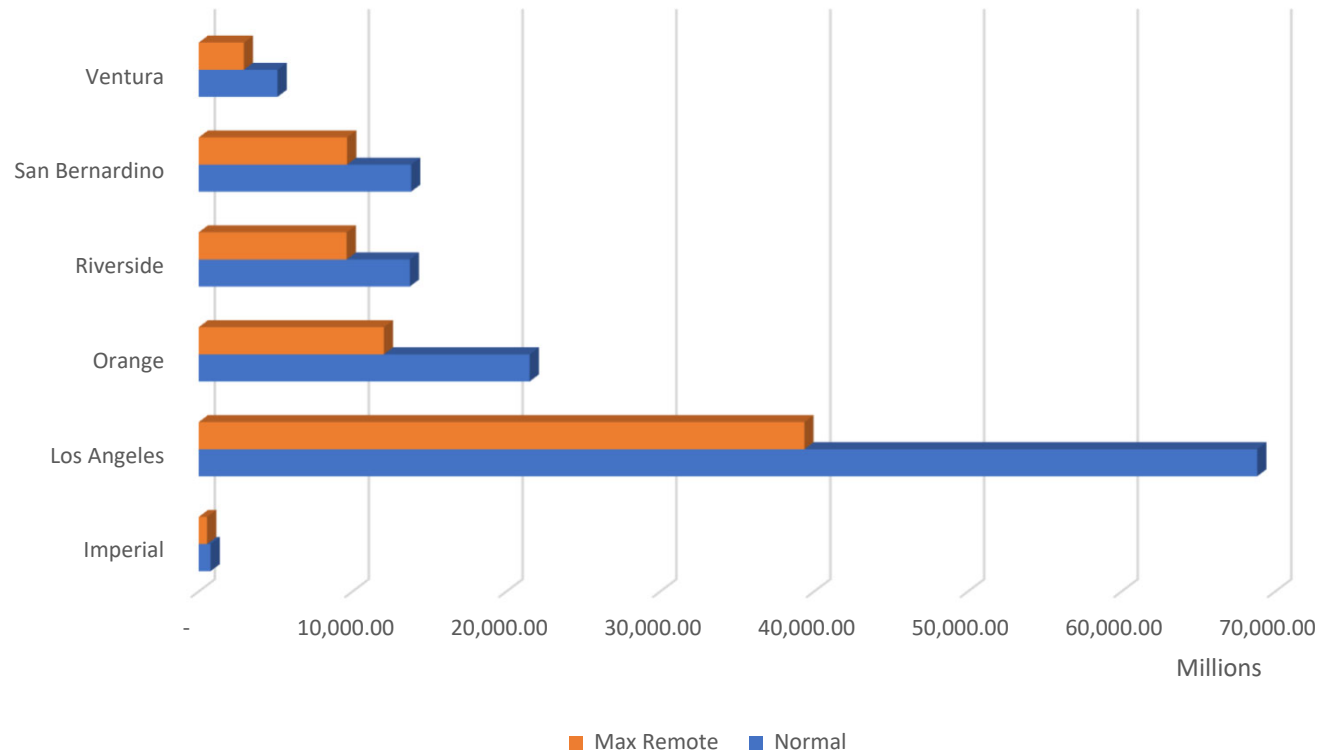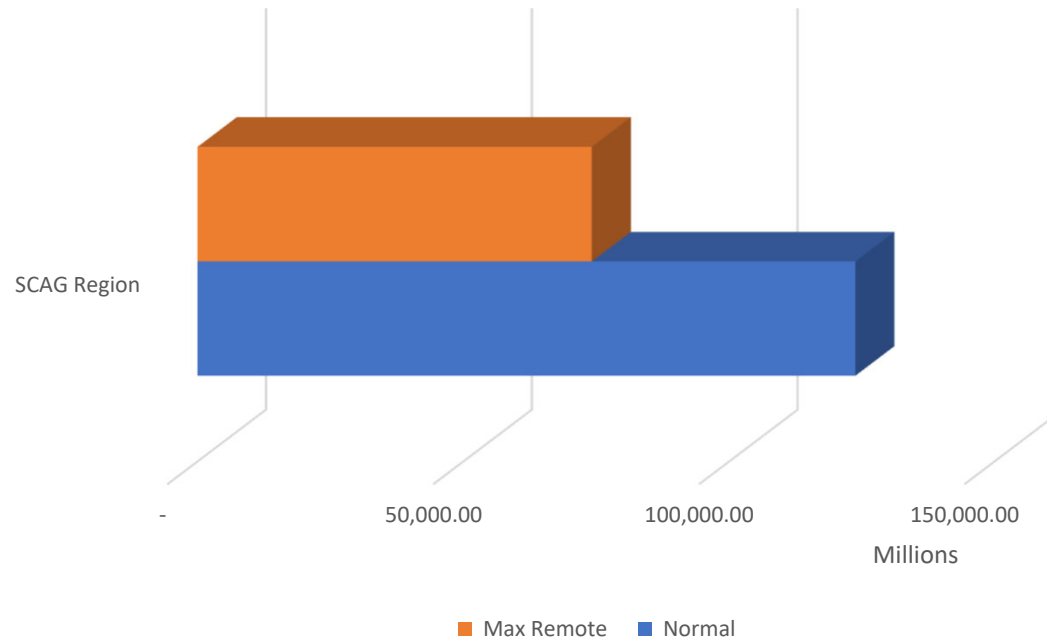# Caltrans Sustainable Communities Grant to SCAG
Agenda Item III: Overview of Regional Trip Inventory
Tom Bellino

Regional GhG Emissions Scenarios

VFDJ#Uls#oyhqwru|#Ksgdwh

- Khog#"shhu#uhylhz"#phhwlqj#rq#5249
- Iqfoxghg#Kloou|#Qruwrq/#FkulV#Vfkplgw/#$hgru#$hhuvrq/#Wrp#Pxoodq#dqg#wkhuv
- Jdyh#ihhgedfn#rq#phkrgrorj|#dqg#gdwd#vrxufhv
- Wrp#zrunlqj#zlwk#Jlrydqql#Fufhoo#wr#jhw#dqglwlrqdo#lqsxw
- Wdkhdzd|v=
  - Phkrgrorj|#lv#vrxqg#exw#shukdsv#qrw#dssolfdeoh#wr#hdo0zruog#sodqqlqj
  - Gdwd#vrxufhv#frxog#eh#h{sodqghg#ksrq/#dqg#dqglwlrqdo#gdwd#Vhhlqj#jdwkhug
  - Zloweh#hlibng#in#floqdw#hsruw#
  - Zlo#p ohh#p ruh#uhqvh#lq#Frqwh{w#dqgjvlgh#hvdufk#dqg#dqd|vlv#lq#wkh#floqdw#hsruw

Peer Review Group Report
Hilary Norton, Pedro Peterson, Tom Mullen, Chris Schmidt

Caltrans Sustainable Communities Grant to SCAG
Agenda Item VI: Report from RBCs on Topline Conclusions

- Inland Empire Regional Broadband Consortium (IERBC)

  ❖ Martha van Rooijen

- Los Angeles Digital Equity Action League (LA DEAL)

  ❖ Bill Allen; Amy Cortina Mathias; Angela Amirkhanian, Sulaiman Kenyatta

- Broadband Consortium of the Pacific Coast (BCPC)

  ❖ Bruce Stenslie; Bill Simmons

- Southern Border Broadband Consortium (SBBC)

  ❖ Tim Kelley; Alessandra Muse

Attachment: SCAG Caltrans Broadband Grant Attachment "A19"

Understanding Travel Behavior Report

Federal Highway Administration (FHWA)
University of California, Berkley – Transportation Sustainability Research Center
Booz Allen Hamilton
March 2016

Abstract: This report presents a research scan of the state of knowledge in transportation, with 249 cited references and studies, to enhance understanding of travel behavior and various influencing factors on future travel.

The report discusses emerging information technology and its impact on new mobility options.

Emerging Modes

- Telework is rapidly growing. Yet, telework has remained difficult to measure and understand from the perspective of supportive policies and impacts.
- Improvements are necessary in the study of emerging alternatives to non-work travel (e.g., e-commerce, telemedicine) and innovative business models (e.g., courier network services) to determine their impacts on travel behavior.

Reference: https://www.fhwa.dot.gov/policy/otps/travel_behavior_research_scan.pdf

Employer Transportation Demand Management (TDM) Programs

Oregon Department of Transportation
Mosaic Transportation Planning Tool and Framework
2010

Abstract: Employer TDM programs help meet local goals for vehicle miles traveled (VMT) and congestion reduction, environmental stewardship, and quality of life.

The Oregon Dept. of Transportation includes Telecommuting as part of recommended TDM programs.

A variety of incentives and options may be included in employer TDM programs, such as:

- Transit pass subsidies
- Commuter information services
- Rideshare matching services (carpool/vanpool)
- Parking cash-out programs
- Preferential parking for carpools or vanpools
- Provision of bike lockers, showers, and/or changing facilities
- Reward and recognition programs
- Emergency ride home services
- Flexible/compressed work schedules
- Telecommuting

Reference: https://www.oregon.gov/ODOT/Planning/Documents/Mosaic-Employer-based-TDM-Programs.pdf

Attachment: SCAG Caltrans Broadband Grant Literature Review - Attachment "A29"

Does Telecommuting Reduce Vehicle Miles Traveled?

University of California, Davis
Department of Civil and Environmental Engineering
Institute of Transportation Studies
July 2004

Abstract: This study examines the impact of telecommuting on passenger vehicle-miles traveled (VMT) through a multivariate time series analysis of aggregate nationwide data spanning 1966-1999 for all variables except telecommuting, and 1988-1998 for telecommuting.

The study assessed the change in annual VMT per telecommuter as well as VMT per telecommuting occasion, *for 1998*. The models suggest that telecommuting reduces VMT, with 94% confidence.

Together with independent external evidence, the results suggest a reduction in annual VMT on the order of 0.8% or less.

Even with impacts that small, when informally compared to similar reductions in VMT due to public transit ridership, telecommuting appears to be far more cost-effective in terms of public sector expenditures.

Reference: https://escholarship.org/uc/item/74t9663f

Attachment: SCAG Caltrans Broadband Grant Literature Review - Attachment "A30"

Review of the Literature on Telecommuting & Its Implications for Vehicle Travel and Emissions

Resources for the Future
Washington D.C.
December 2010

Abstract: A review of 20 empirical studies of telecommuting, all of which focus on the trip reduction perspective. The studies include earlier ones with smaller datasets, such as some pilot studies of individual employers, and more recent studies based on broader surveys of both telecommuters and non-telecommuters.

Although an individual telecommuter may experience a sharp reduction in VMT, total benefits depend on how many people are telecommuting, how often they are doing so, and the duration of telecommuting.

Note: Review included analyzing data from a 2002 SCAG Survey of telecommuters and non-telecommuters.

> Most studies of VMT and trip reductions from telecommuting show that telecommuters significantly reduce both daily trips and VMT. Not only does commute VMT fall, but noncommute VMT appears to fall in some cases as well. No study that we reviewed showed a significant increase in noncommute travel for telecommuters. Findings across the studies show that the average number of daily trips taken on telecommuting days is anywhere from 27% to 51% lower than on nontelecommuting days, and VMT is 53% to 77% lower. These reductions lead directly to significant reductions in organic gases, NO$_x$, CO, and particulates.

Reference: https://media.rff.org/documents/RFF-DP-04-44.pdf

Caltrans Sustainable Communities Grant to SCAG
Agenda Item VII and VIII: Expert Advisors Discussion

- Final Committee Meeting: Friday, March 18, 8AM-10AM

- March 11: Draft Final Report Distributed

- March 16: Submit Comments to CETF for Compilation

- March 18: Provide Additional Feedback COB

- March 28-31: Final Report Published and Distributed

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