



# Overview

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- 1 Climate Action: Building on Success
- 2 Inside Our Playbook
- 3 Public Review Feedback
- 4 Proposed Final Playbook
- 5 CEQA Findings
- 6 Recommendations

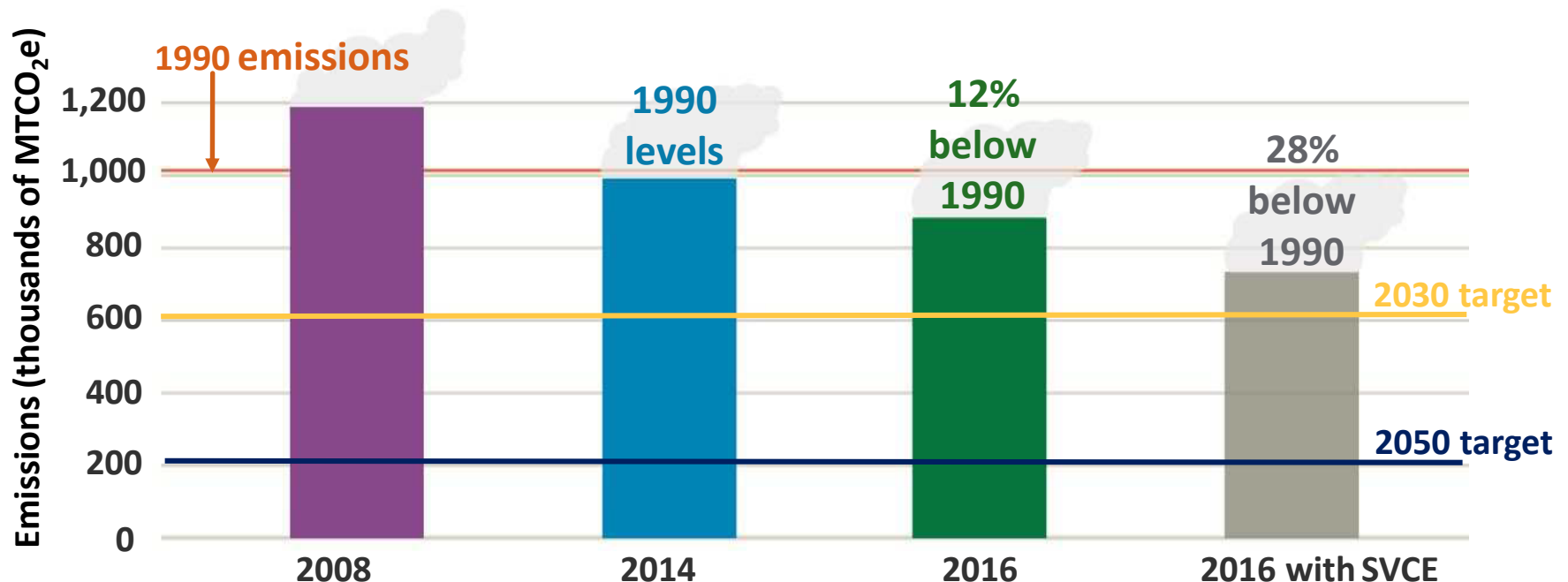
# Climate Action: Building on Success

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# Climate Action in Sunnyvale

- Climate Action Plan 1.0 adopted 2014
- Goal: Reduce emissions to 1990 levels by 2020 (achieved by 2014)
- California State targets:
  - ♦ 40x30
  - ♦ 80x50





# A New Era of Climate Action

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- Climate Action Plan (2.0) Initiative:
  - Establish emission targets
  - Identify path to reach them
- Formed CAP 2.0 Advisory Committee
- Consultant support for:
  - Technical Analysis
  - Community Engagement
- Result:
  - **Climate Action Playbook**



# What is a Climate Action Playbook?

*A plan to reduce greenhouse gas emissions to address climate change.*



Proposed  
**End Game**

80% below  
1990 by 2050  
(carbon neutrality)



# Inside Our Playbook



# How Our Playbook is Organized





# Six Climate Strategies for the Win

## Strategy 1

Promoting Clean Electricity



## Strategy 2

Decarbonizing Buildings



## Strategy 3

Decarbonizing Transportation & Sustainable Land Use



## Strategy 4

Managing Resources Sustainably



## Strategy 5

Empowering Our Community



## Strategy 6

Adapting to a Changing Climate



# Strategy 1: Promoting Clean Electricity

Plays		Targets	Moves	
1.1	Promote 100% clean electricity	2030: 100% participation in clean electricity 2050: 100% participation in clean electricity	1.A	Continue to support and steer SVCE in providing clean power and decarbonization programs.
			1.B	Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.
1.2	Increase local solar photovoltaics	2030: 3% of load from local solar 2050: 5% of load from local solar	1.C	Research a mandatory solar roof ordinance for new commercial developments.
1.3	Increase distributed electricity storage	2030: 1% of electricity stored in batteries locally 2050: 5% of electricity stored in batteries locally	1.D	Collaborate with SVCE to evaluate opportunities for energy storage to maximize the utilization of local solar supply and to enhance resiliency.
Path to 2050			3-5 Year Plans	

# Public Review Feedback

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# Community Engagement for Draft Playbook

**7 public meetings • 7 community events • 152 people surveyed**

Public Meetings	Attendees±
CAP 2.0 Advisory Committee (CAC)	18
Community	17
Joint Info Study Session for 3 Commissions	24
Focus Group: Developer	3
Focus Group: Business	4
Informal Meeting: Unitarian Universalist Fellowship	27
Informal Meeting: Rotary Club	26
<b>TOTAL</b>	<b>119</b>

Surveys	Responses
Online	125
PDF	6
Hard Copy	21
<b>TOTAL</b>	<b>152</b>

Events	No. of People Reached
Google	205
Juniper	70
Farmer's Market	91
Mobile Farmer's Market	20
Home Buyers	12
Fit N Fun	211
Senior Center	1
<b>TOTAL</b>	<b>610</b>

*± The attendee count does not distinguish community members who may have attended more than 1 meeting.*

# Outreach for Draft Playbook

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## Online:

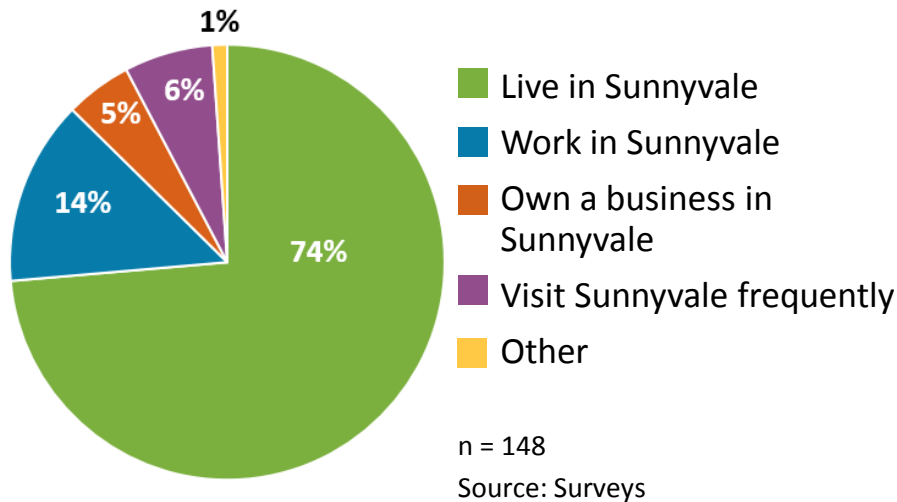
- Top 30 Projects webpage
- News Post on City's website
- Social Media (Facebook, Next Door)
- Mercury News Website Banner Ads
- Update Sunnyvale (3/21, 4/18)
- Sustainable Sunnyvale e-Newsletter (4/5)
- Library and Senior Center e-newsletters
- City Events Calendar
- Email Blasts to CAC, B/C, Playbook subscription list, Playbook workshop attendees, Mercury News list, City staff

## Other channels:

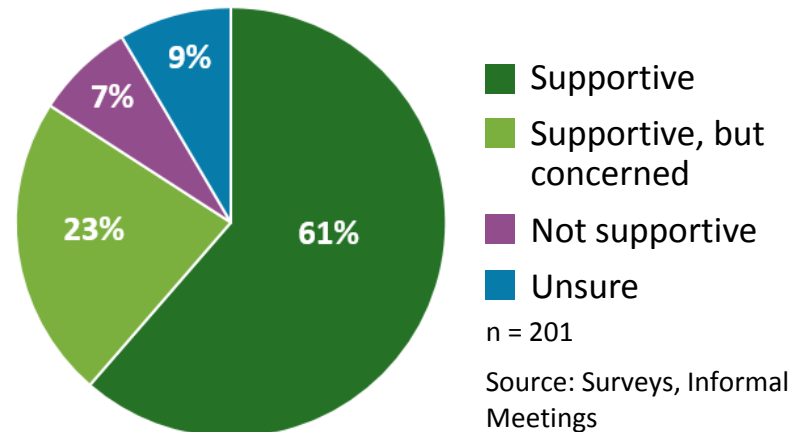
- Sunnyvale Sun
- Council Announcement
- Screen ads at City facilities

# Online Survey Feedback (Handout #1)

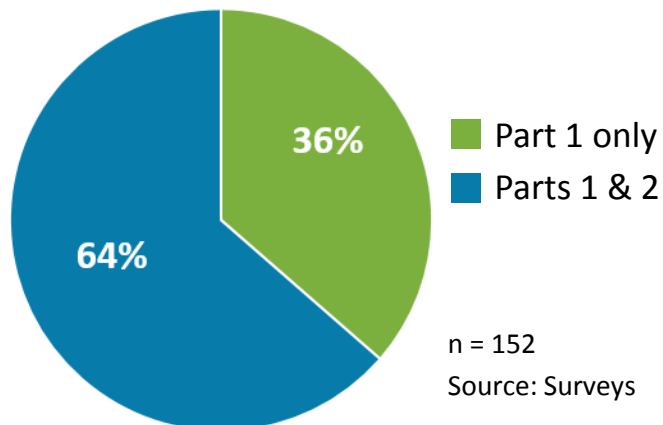
## Survey Respondents



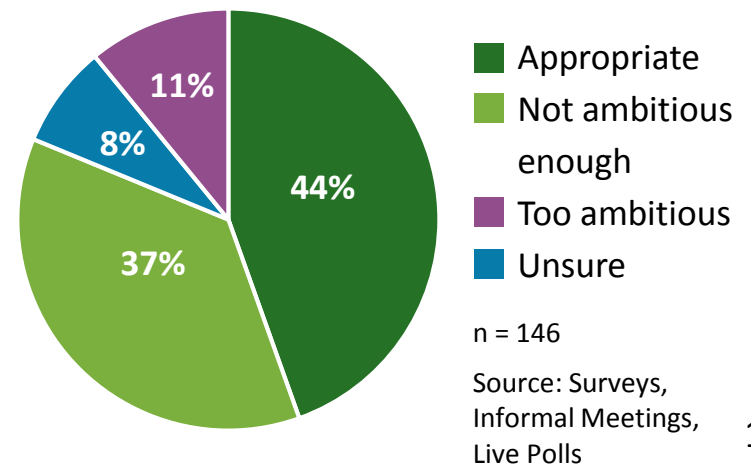
## Opinion of Local Climate Action



## Survey Completion

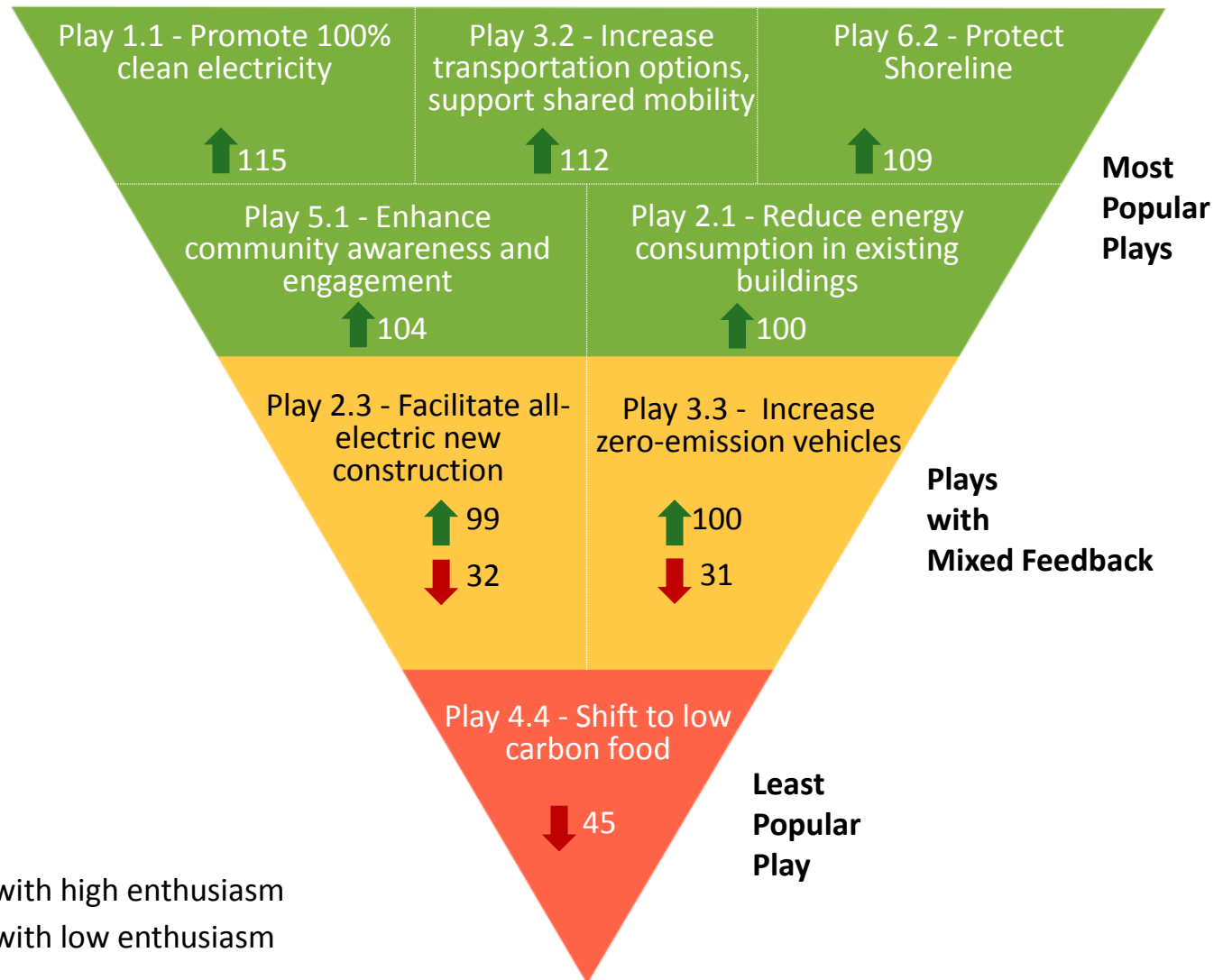


## Opinion of Sunnyvale's Proposed Target





# Feedback on Plays (Handout #1)



Proposed  
**Final**  
**Climate**  
**Action**  
**Playbook**



# Changes Based on Feedback (Handout #2)



Accelerated target for Play 2.3 to achieve all-electric new construction starting in 2030 (*vs. all-electric by 2050 in Draft Playbook*).



Adjusted transportation vehicle miles traveled (VMT) targets downward for Plays 3.1 and 3.2 to reflect targets that are challenging and attainable. Revised targets:

- 2030: 13% reduction in vehicle miles per person (*vs. 37% reduction in Draft Playbook*);
- 2050: 25% reduction in vehicle miles per person (*vs. 47% reduction in Draft Playbook*).



Created a new Play 1.3 to emphasize importance of expanding distributed electricity storage.



Simplified language for Zero Waste targets for Play 4.1 to be more meaningful to the community. Revised targets for 2030 and 2050 are to reduce landfilled garbage to 1 lb per person per day.



Adjusted language for action on sustainable food in Play 4.4 to emphasize consumer choice.

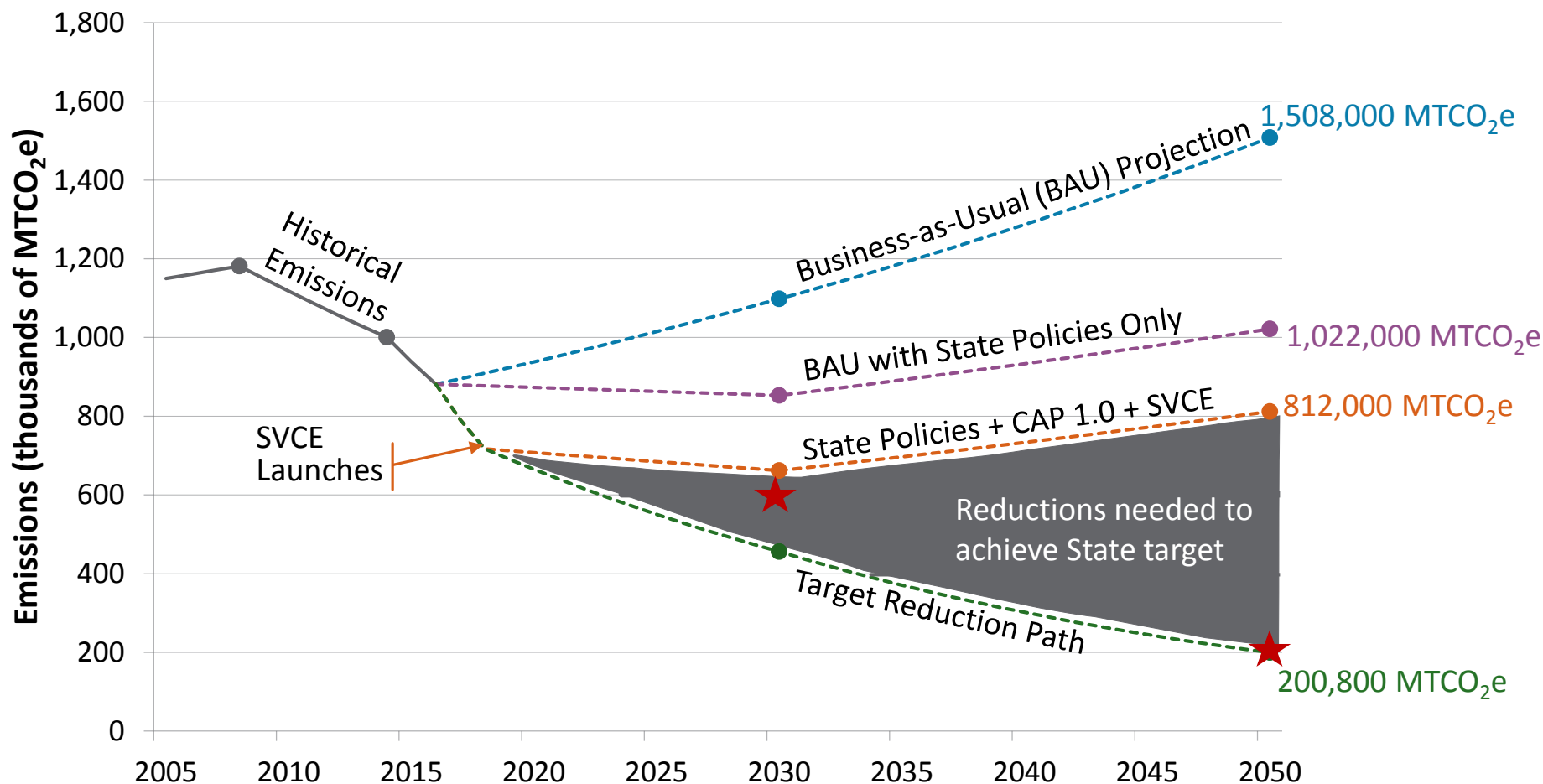
**55 x 30**

Based on changes to Play-level targets, 2030 target was adjusted downward from 60% to 55%.



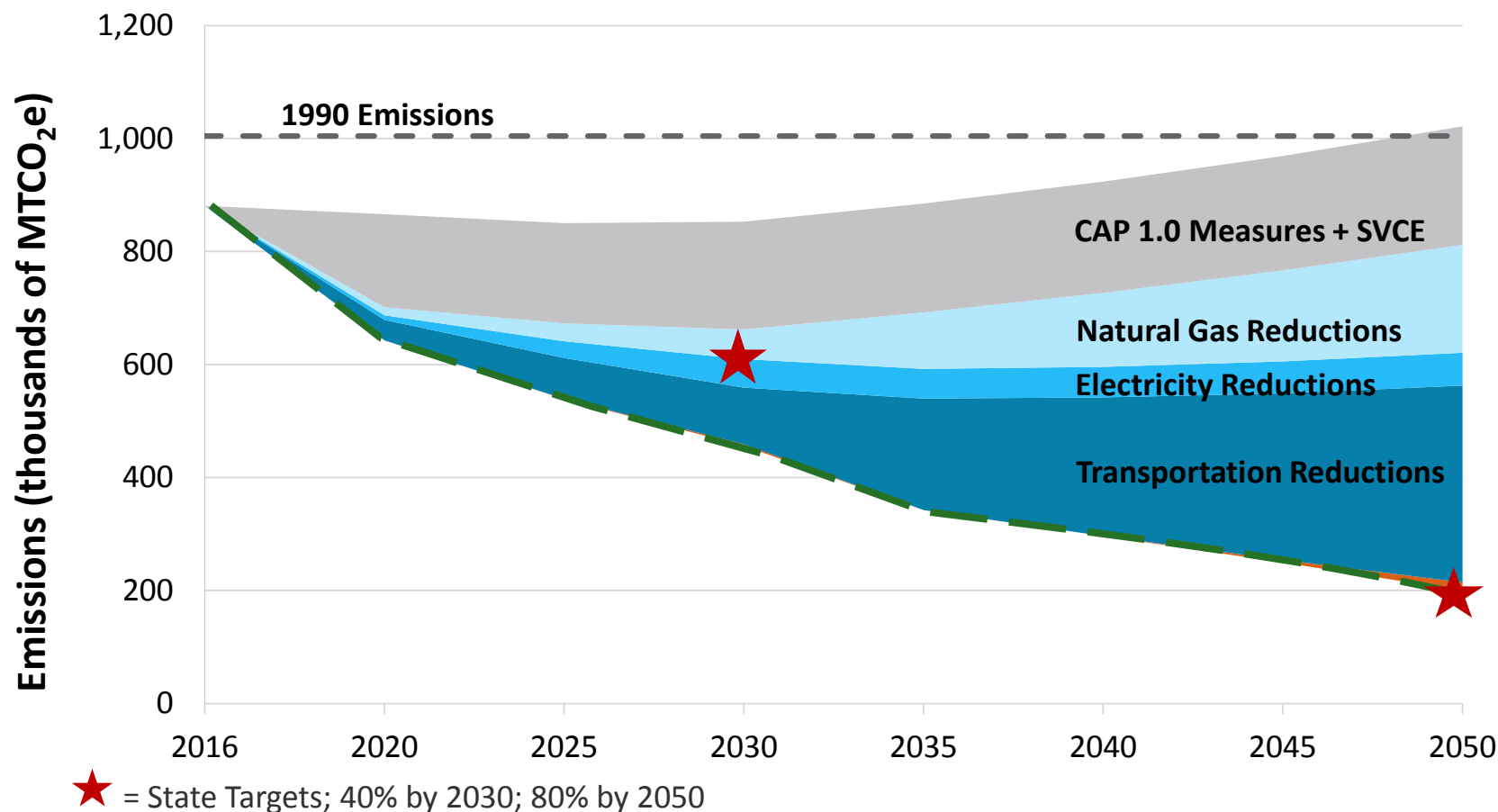
# “End Game” 80x50

Overall Impact: 55% by 2030; 80% by 2050



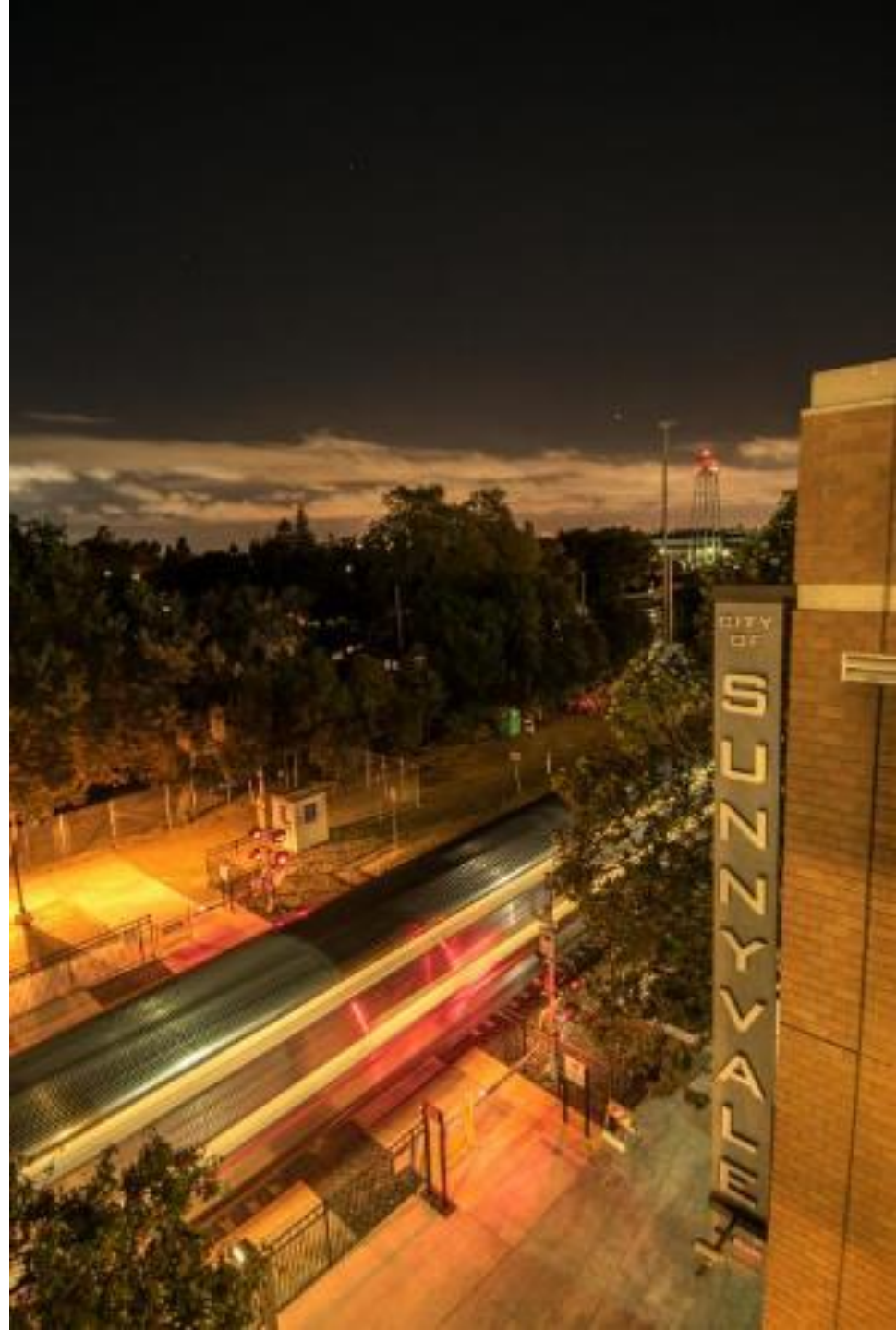
★ = State Targets: 40% by 2030; 80% by 2050

# Emissions Reductions from Playbook



GHG reductions in the waste sector (orange sliver below Transportation) constitute <3% of total emissions reductions needed to achieve 80x50.

# CEQA Findings





# CEQA Findings

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- Adopting CAP is a “project” within the CEQA
- CAP update required by Mitigation Measure 3.13.3 of the LUTE EIR to account for new LUTE growth projections
- Used environmental checklist to determine:
  - ◆ **No significant environmental impacts from CAP that would require additional environmental review under CEQA**
- Prepared Addendum (Attachment 2) to LUTE EIR that incorporates Playbook as a part of the LUTE

# Recommendations



# CAC, SC, and BPAC - Key Recommendations

Reference	Recommendation	Meeting Body
Play 1.3	Revise 2030 target to “ <b>2%</b> of electricity demand stored...”	CAC, SC
Move 2.E	Revise language to: “Evaluate code and permitting processes to streamline building electrification <b>to achieve 100% all-electric permits by 2023</b> ”	CAC, SC
<b>Plays 3.1 and 3.2</b>	<b>Enhance targets for Plays 3.1 and 3.2 to:</b> <b>(a) 2030: 20% reduction in vehicle miles per person</b> <b>(b) 2050: 40% reduction in vehicle miles per person</b>	<b>CAC, SC, BPAC</b>
Play 4.1	Revise 2050 target to: “Reduce landfilled garbage to <b>&lt;1 lb</b> per person per day”	CAC, SC
General	Add special emphasis to Moves 3.A (additional housing), 3.B (parking strategies), and 3.E (update Bike/Ped/SRTS Plan)	BPAC
<b>Overall targets</b>	<b>Modify based on modifications to targets for Plays 3.1 and 3.2:</b> <b>(a) 2030 target: 56.3% below 1990</b> <b>(b) 2050 target: 81.5% below 1990</b>	<b>CAC, SC, BPAC</b>

# Recommendations

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## Recommend that the City Council:

- Alternative 1: Adopt a Resolution to Adopt the Climate Action Playbook, including the greenhouse gas reduction targets of 55 percent by 2030 and 80 percent by 2050, make the findings required by CEQA and accept the Addendum to the LUTE EIR.
- Alternative 2: Adopt a Resolution to Adopt the Climate Action Playbook, including the greenhouse gas reduction targets of 55 percent by 2030 and 80 percent by 2050, make the findings required by CEQA and accept the Addendum to the LUTE EIR, with modifications.
- Alternative 3: Other recommendation provided by the Commission.

**Staff Recommendation: Alternative 1**



Thank you  
for your  
contributions!

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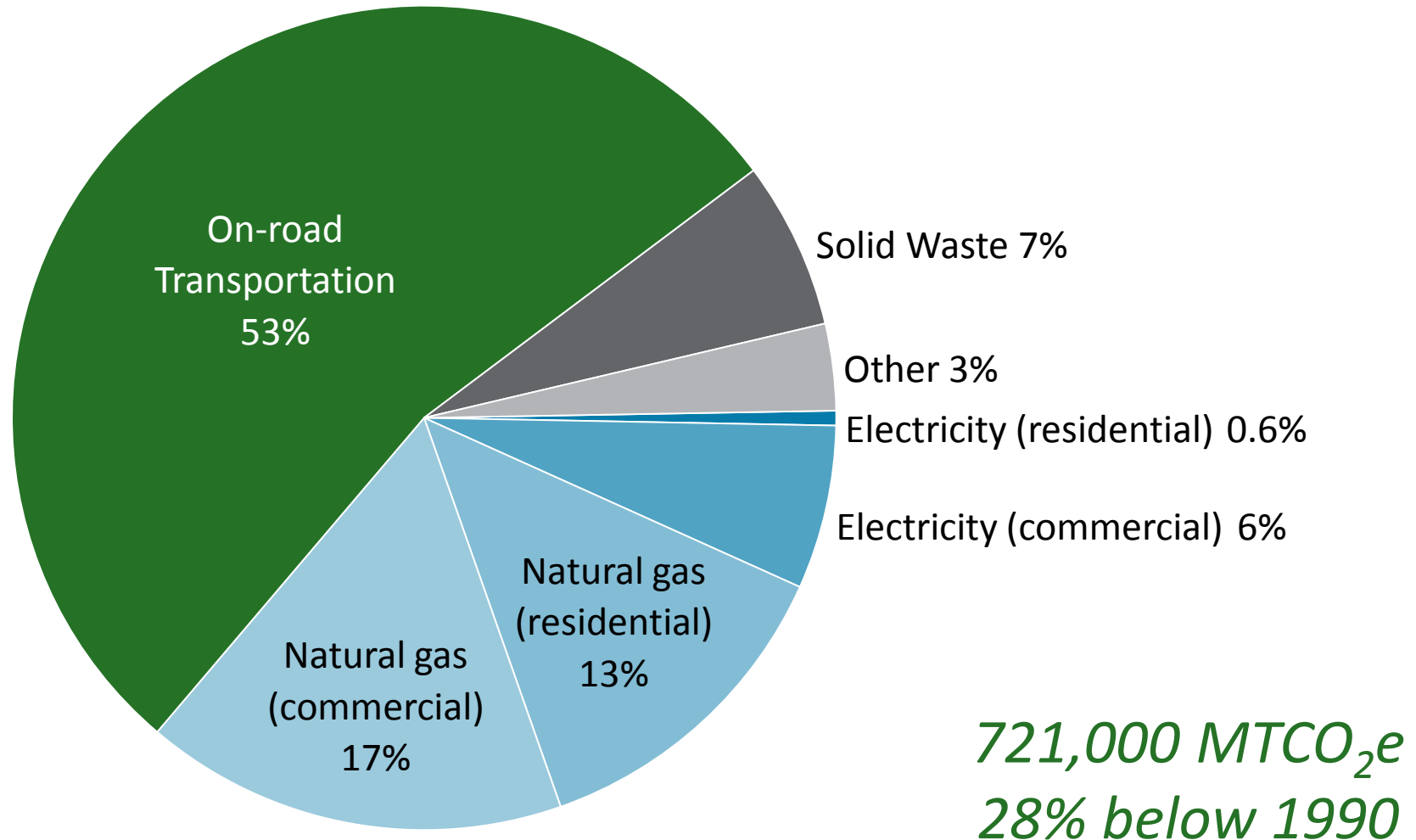
# Additional Info

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# Sunnyvale's 2016 Emissions (with SVCE)

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# Alternate Phrasing of Transportation Targets

Metric	2016	2030 Targets	2050 Targets
Citywide Annual VMT per Service Population	3,705	3,230	2,775
Percent Change in Citywide Annual VMT per Service Population (relative to 2016)	0%	-13%	-25%
Clean Fuel Vehicle Fleet Adoption Portion	0.5%	20%	75%
Clean Citywide Annual VMT per Service Population	17	646	2,081
Non-Clean Citywide Annual VMT per Service Population	3,688	2,584	694
<b>Change in Non-Clean Annual VMT per Service Population</b>	<b>0%</b>	<b>-30%</b>	<b>-81%</b>

2030 Target: **30%** reduction in fossil fuel-powered vehicle miles per person

2050 Target: **81%** reduction in fossil fuel-powered vehicle miles per person



## Plays 3.1, 3.2, and 3.3: VMT and EV Targets

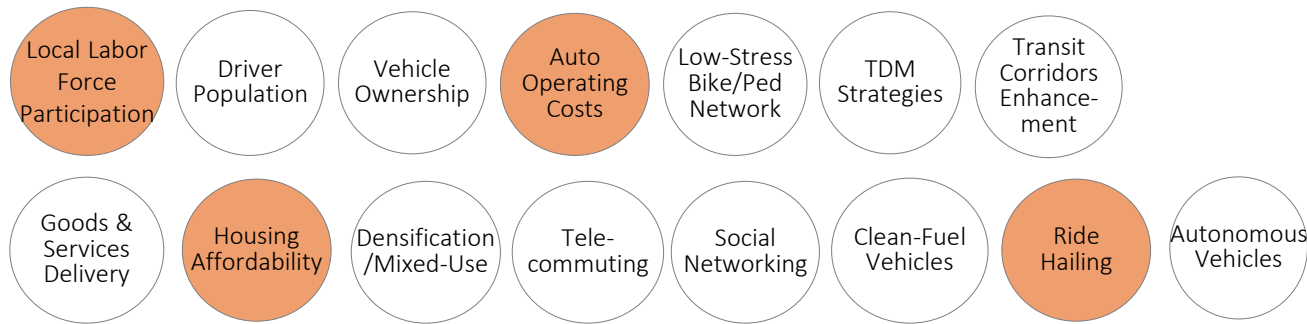
	Scenario Description	2030 VMT/capita reduction	2030 Overall Target	2050 VMT/capita reduction	2050 Overall Target
1	Draft CAP + revised Play 2.3 target*	37%	61.0%	47%	82.2%
2	Modeled but not used	13%	55.0%	11%	79.0%
3	<b>Proposed Final Playbook</b>	<b>13%</b>	<b>55.0%</b>	<b>25%</b>	<b>80.1%</b>

\*Play 2.3 target revised to achieve 100% all-electric buildings by 2030.

# Source of VMT targets

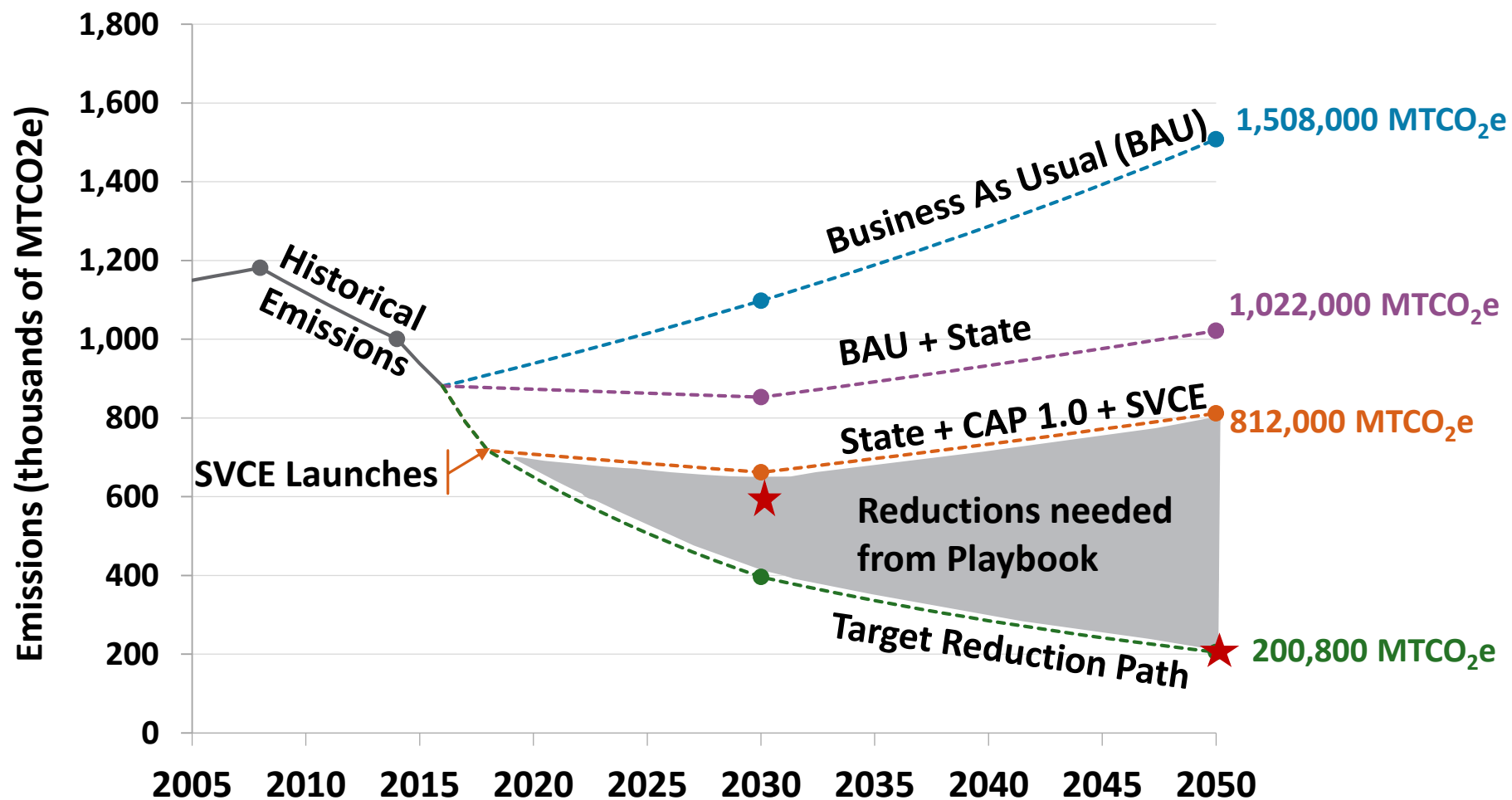
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- VMT estimate produced by TrendLab+ tool
- Use-defined “desired” future trends for 15 variables:



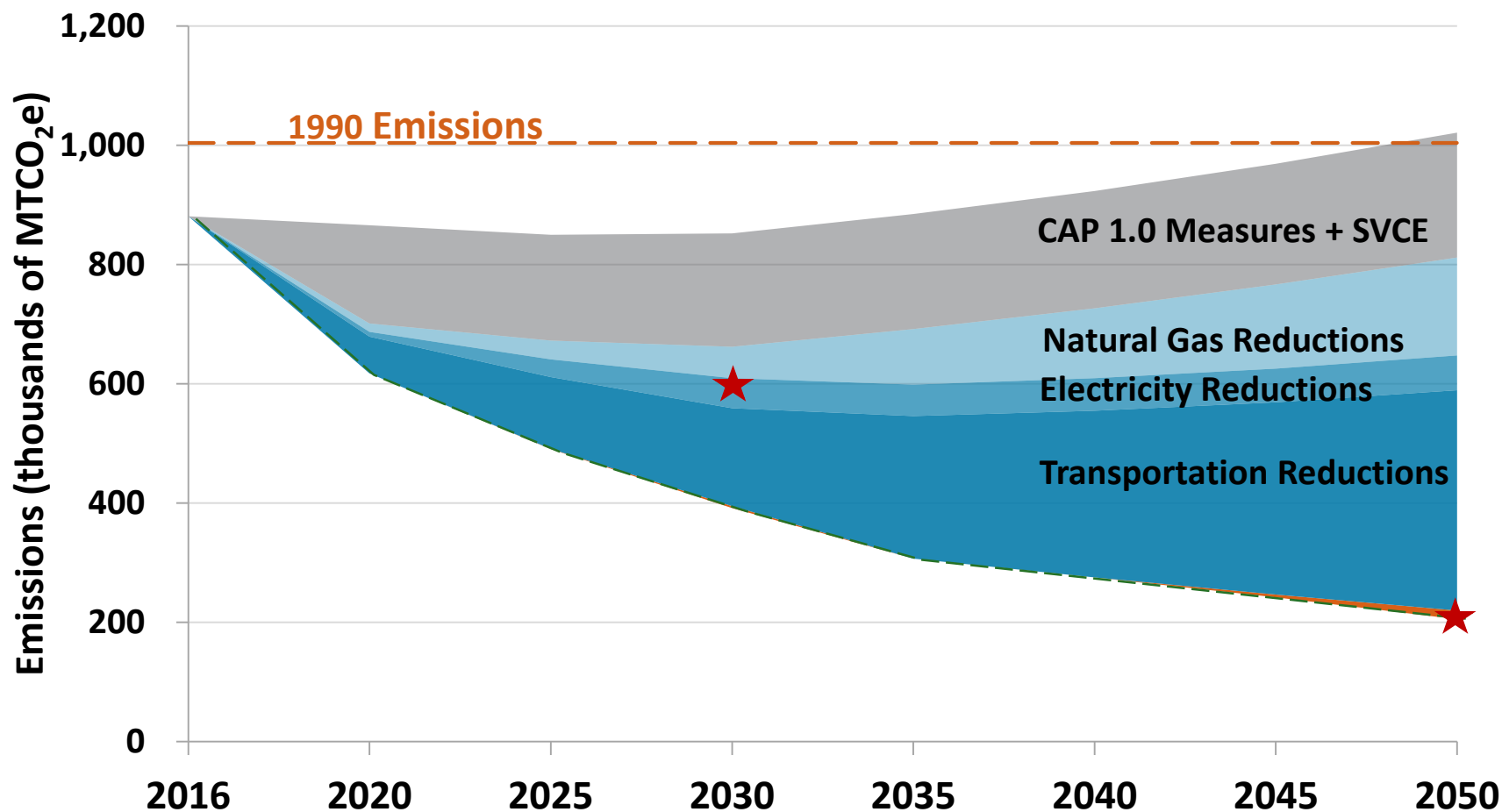
- **Most impactful trends are ones City has limited influence over:**
  - ◆ Local Labor Force Participation
  - ◆ Auto Operating Costs
  - ◆ Housing Affordability
  - ◆ Ride Hailing

# Draft Playbook -- “End Game” 80x50



★ = State Targets: 40% by 2030; 80% by 2050

# Draft Playbook - Emissions Reductions from Playbook



Waste sector reductions (orange sliver) are <3% of total emissions reductions needed for 2050.

★ = State Targets; 40% by 2030; 80% by 2050



# Summary of Changes (Handout #2)



## Strategy 1: Promoting Clean Electricity

Play 1.3 Increase distributed electricity storage

2030 Target: 1% of electricity demand stored in batteries locally  
2050 Target: 5% of electricity demand stored in batteries locally



## Strategy 2: Decarbonizing Buildings

Play 2.3 Achieve all-electric new construction

2030 Target: 100% all-electric new buildings  
2050 Target: 100% all-electric new buildings



## Strategy 3: Decarbonizing Transportation & Sustainable Land Use

Play 3.1 Balance land use supply and enhance urban form

2030 Target: 13% reduction in vehicle miles per person  
2050 Target: 25% reduction in vehicle miles per person

Play 3.2 Increase transportation options and support shared mobility

Play 3.3 Increase zero-emission vehicles

2030 Target: 20% of all vehicles on road are zero-emission vehicles  
2050 Target: 75% of all vehicles on road are zero-emission vehicles



## Strategy 4: Managing Resources Sustainably

Play 4.1 Achieve Zero Waste goals for solid waste

2030 Target: Reduce landfilled garbage to 1 lb per person per day  
2050 Target: Reduce landfilled garbage to 1 lb per person per day

Play 4.4 Promote sustainable food choices

Supports broader emissions reductions

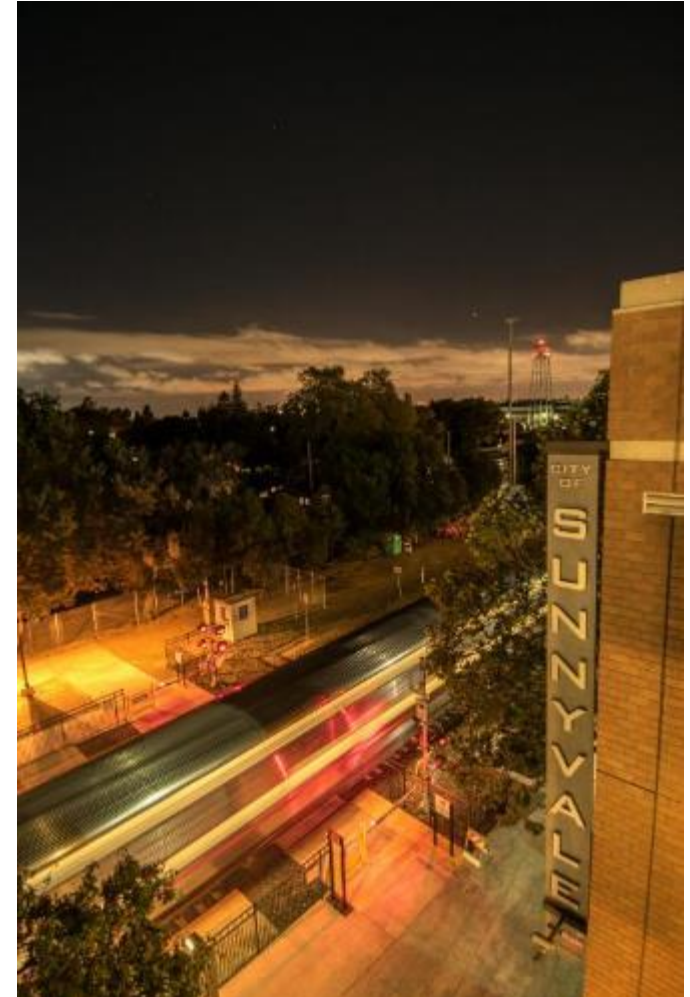
# Adopted Budget for Playbook

PROJECT BUDGET (PROJECT #831290)	Costs
Prior Actual	\$594,687
FY 2018-2019	\$381,083
<i>Rolled over</i>	<i>\$975,770</i>
FY 2019-2020	\$638,918
FY 2020-2021	\$569,566
FY 2021-2022	\$426,758
<i>Budgeted for Game Plan 2022</i>	<i>\$1,635,242</i>
<b>TOTAL</b>	<b>\$2,611,012</b>

- Additional Staff:
  - Environmental Programs Specialist in ESD
  - Transportation Planner in DPW
  - Sustainability Fellow in ESD
- Consultant services
- Temporary staffing
- Infrastructure needs

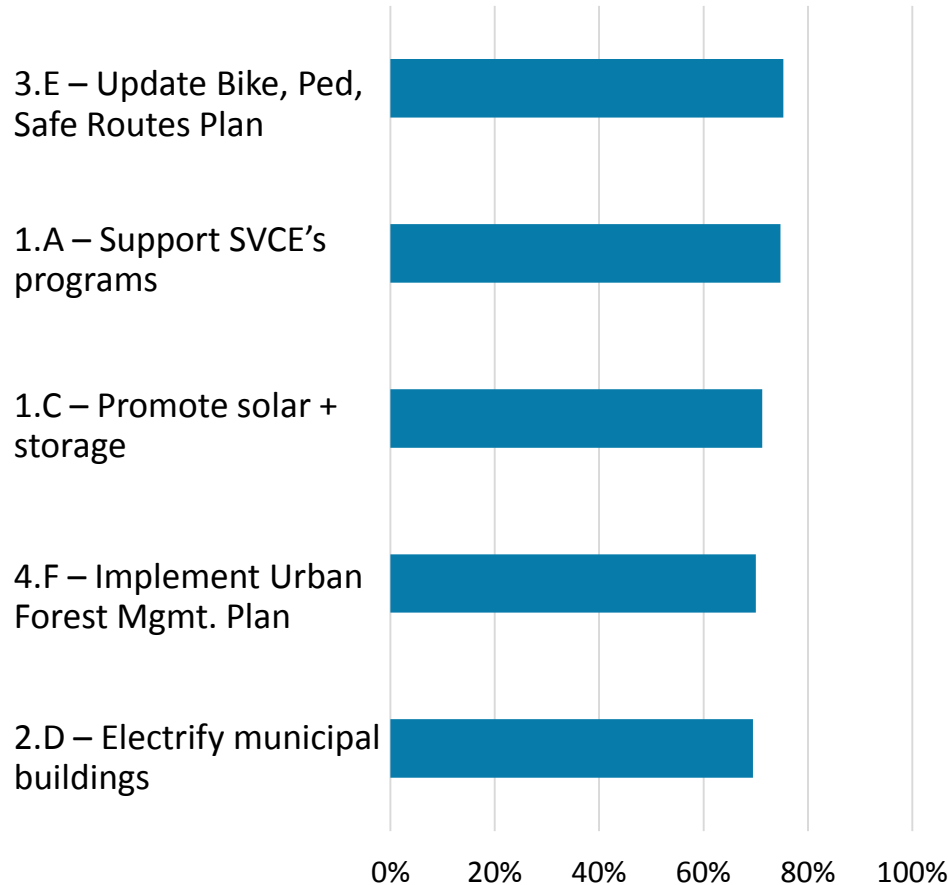
# Funding Opportunities to Explore

- **Partnerships and collaborations (e.g., Silicon Valley Clean Energy)**
- **Study differential utility use tax (UUT) to incentivize electrification**
- Carbon impact fees for development projects
- User fees for selected activities and services
- Paid parking in selected locations
- Transportation impact fees

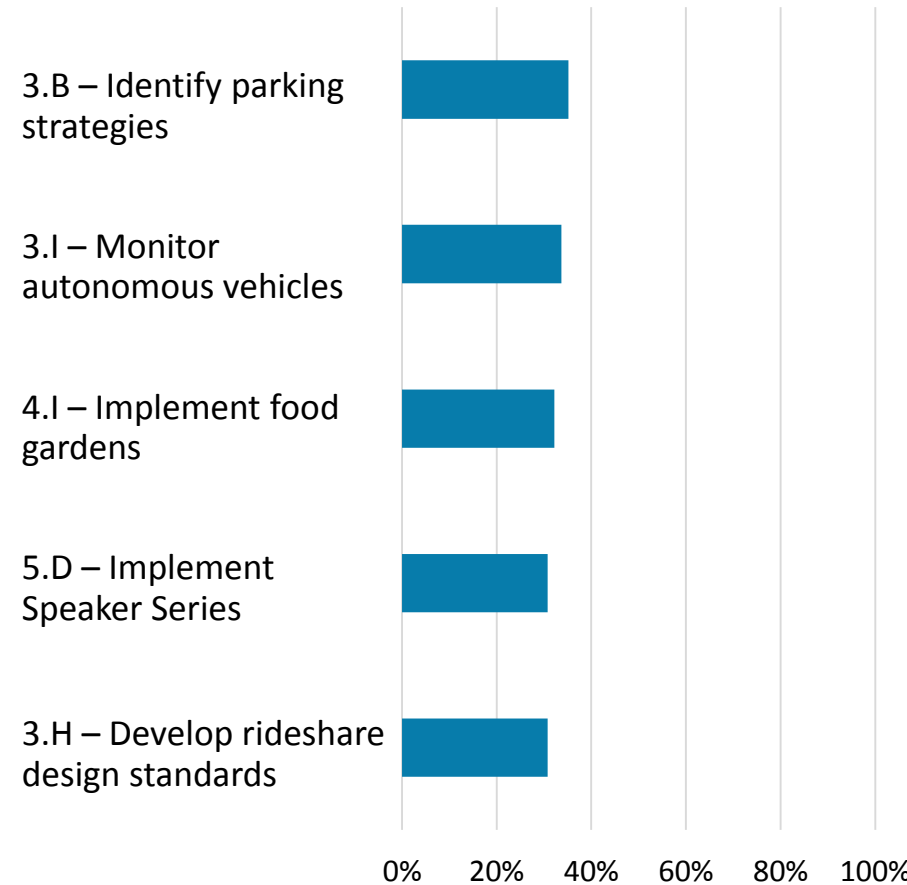


# Feedback on Next Moves – from Surveys

## Most Enthusiasm

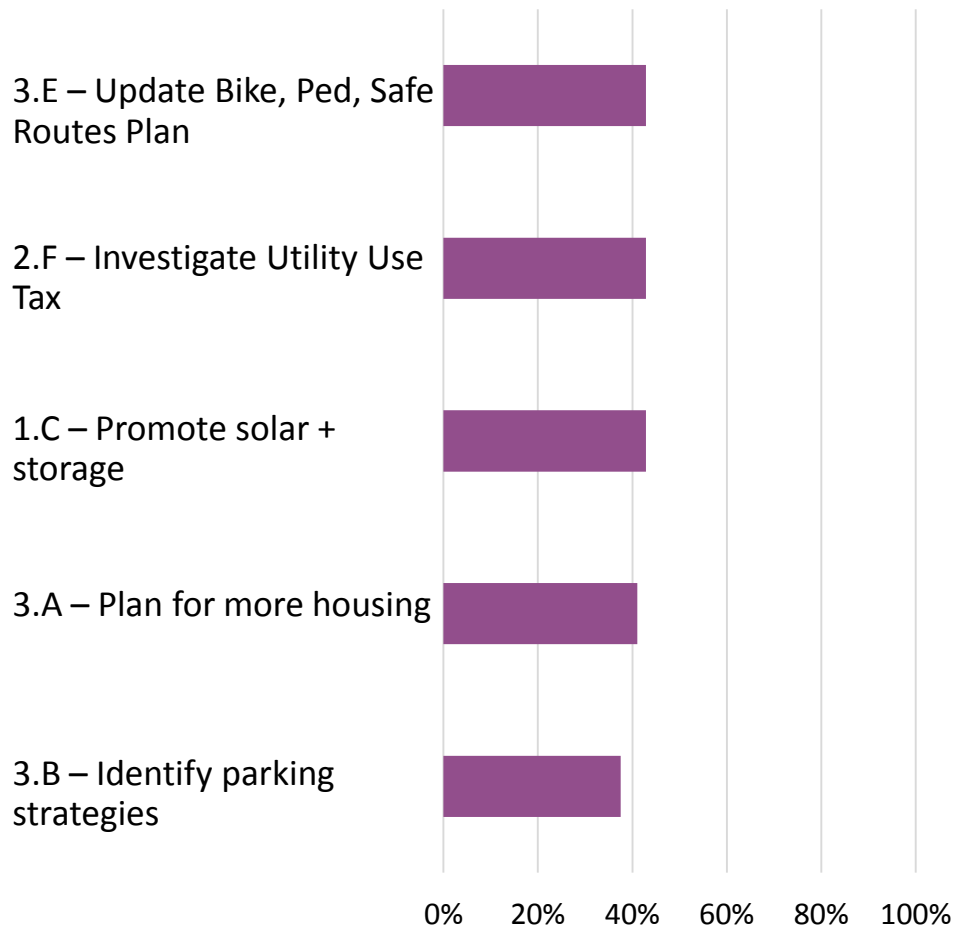


## Least Enthusiasm

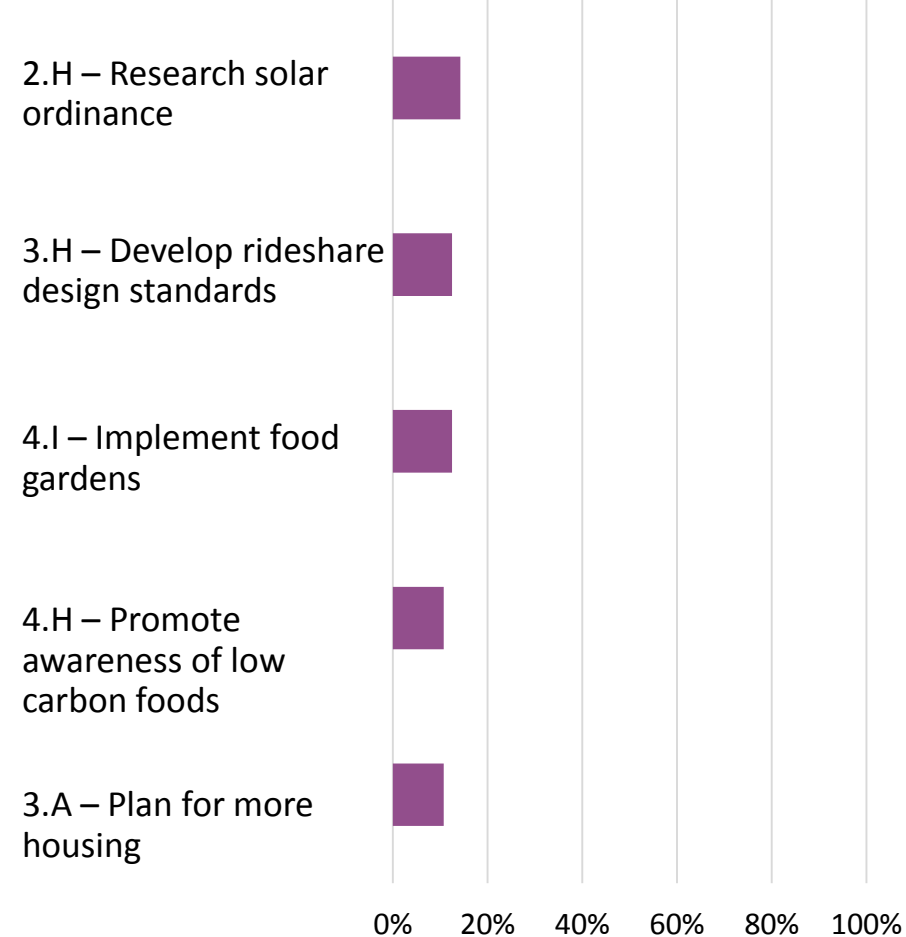


# Feedback on Next Moves – from Meetings

## Most Excitement



## Most Concern/Remove





# Gearing Up for FY20 Next Moves

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- Recruit and fill new staff positions in ESD and DPW
- Establish intra-city coordination for CAP implementation
- Pursue grant opportunities and partnerships for funding
- Already conditioning for:
  - Move 2.E: Streamline building electrification
  - Move 3.J: Develop a Community EV Readiness/Infrastructure Plan
  - Move 3.K: Promote community adoption of EVs
  - Move 5.C: Create stronger social media + web presence for climate
  - Move 5.H: Annual communitywide GHG inventory
- 2<sup>nd</sup> half:
  - Move 3.L: Electrify municipal fleet
  - Move 5.G: Implement improvements for climate action data tracking
  - Move 2.F: Study potential for UUT
  - Move 3.C: Enhance TDM program implementation + monitoring
  - Move 5.A: Pilot grassroots engagement strategy