



**CITY OF  
MERCED**

# **PROGRAMMATIC CLIMATE ACTION PLAN FOCUS GROUP**

SEPTEMBER 10, 2015

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(formerly PMC)



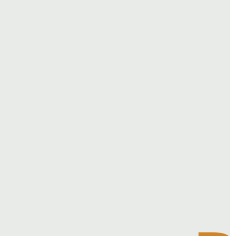


# Agenda

- Welcome and introductions
- Project update
- PCAP project summary
- Draft PCAP
- Other CAP implementation tools (Project Options Checklists, UDM, monitoring tool, Zoning Code Index)
- Next tasks and schedule



# CITY OF MERCED PROGRAMMATIC CLIMATE ACTION PLAN



## PROJECT UPDATE



# Anticipated Timeline



GHG reduction strategy  
and feasibility analyses

UDM

Monitoring tool

PCAP

Project Options Checklists



**Potential next  
Focus Group  
Meeting:  
November  
2015**



# Last Meeting

- Reviewed Project Options Checklists and monitoring tool
- Provided an update on the Unified Design Manual



# Last Meeting

- Focus Group input
  - Expand diversity of options in Project Options Checklists
  - Challenge of mitigating GHG emissions associated with adopted growth forecasts
  - Expectations for data and analysis in the PCAP





# Project Update

- Since the previous meeting, the team has completed drafts of all four project components

## Tools to Streamline Regulations

PCAP (stand-alone implementation plan with 31 quantified measures and Project Option Checklists)



Draft UDM



Monitoring tool





# Updates to Project Options Checklists

- Project Options Checklists previously provided eight options (four residential, four nonresidential)
  - Apply to new development
  - Show how projects can comply with the CAP
- Team updated checklists based on Focus Group input
  - Now provide 12 total options
  - Include strategies for passive design and water conservation





# New Project Options

Design Elements for New Residential Projects	Options	
	5	6
Construct buildings to CALGreen Tier 1		✓
Install an on-site solar photovoltaic system (2 kW)	✓	
Reduce vehicle trips 25% below average	✓	
Reduce vehicle trips 28% below average		✓
Use passive solar design techniques	✓	
Use trees to shade building	✓	
Be located in a mixed-use building		✓
Use an NEV for trips when feasible		✓
Install a greywater system		✓



# New Project Options

	Options	
	5	6
<b>Design Elements for New Nonresidential Projects</b>		
Construct buildings to CALGreen Tier 1	✓	
Be located in an area of moderate road connectivity		✓
Reduce vehicle trips 12% below average		✓
Reduce vehicle trips 20% below average	✓	
Use passive solar design techniques		✓
Use trees to shade building	✓	
Be located in a mixed-use building		✓
Use smart irrigation and controllers		✓
Install water-saving fixtures that exceed state standards		✓
Provide an EV charging station	✓	

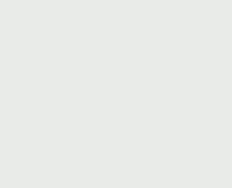


# 8/19 Planning Commission Discussion

- How is the PCAP positioned to dial back requests of new development if the state out-performs expectations?
  1. The PCAP accounts not just for current state actions but also anticipated state actions
  2. Additional state action and pending legislation are focused on post-2020 targets, whereas the primary focus of the PCAP is 2020
  3. The PCAP provides a dynamic monitoring program, including 1) an annual report, 2) tools to re-evaluate reductions, and 3) recommendation to re-evaluate post-2020 targets by 2018 (following state action)



# CITY OF MERCED PROGRAMMATIC CLIMATE ACTION PLAN



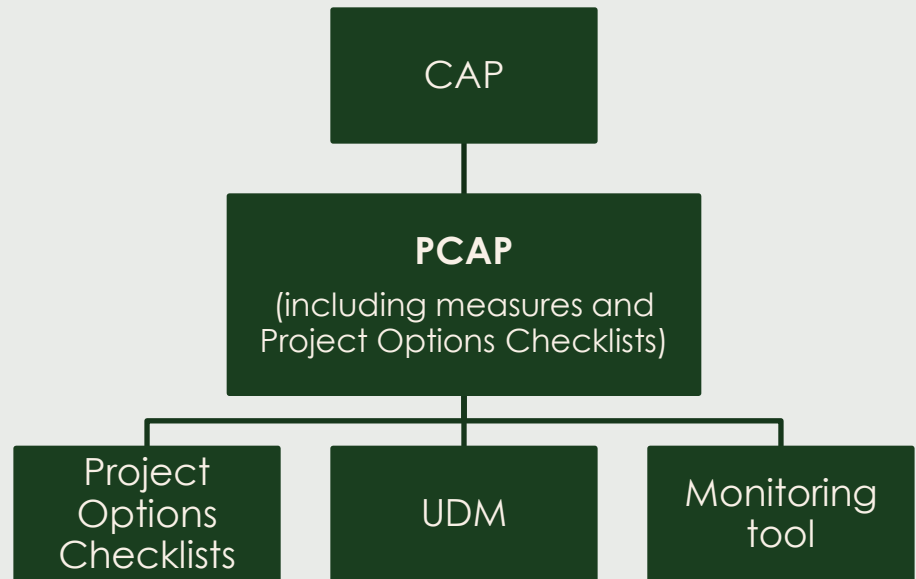
## PCAP PROJECT SUMMARY



# What is the PCAP project?

- Provides a **stand-alone implementation plan** for the CAP (the PCAP)
- Documents **consistency with CEQA criteria** for project streamlining
- Provides **implementation tools**

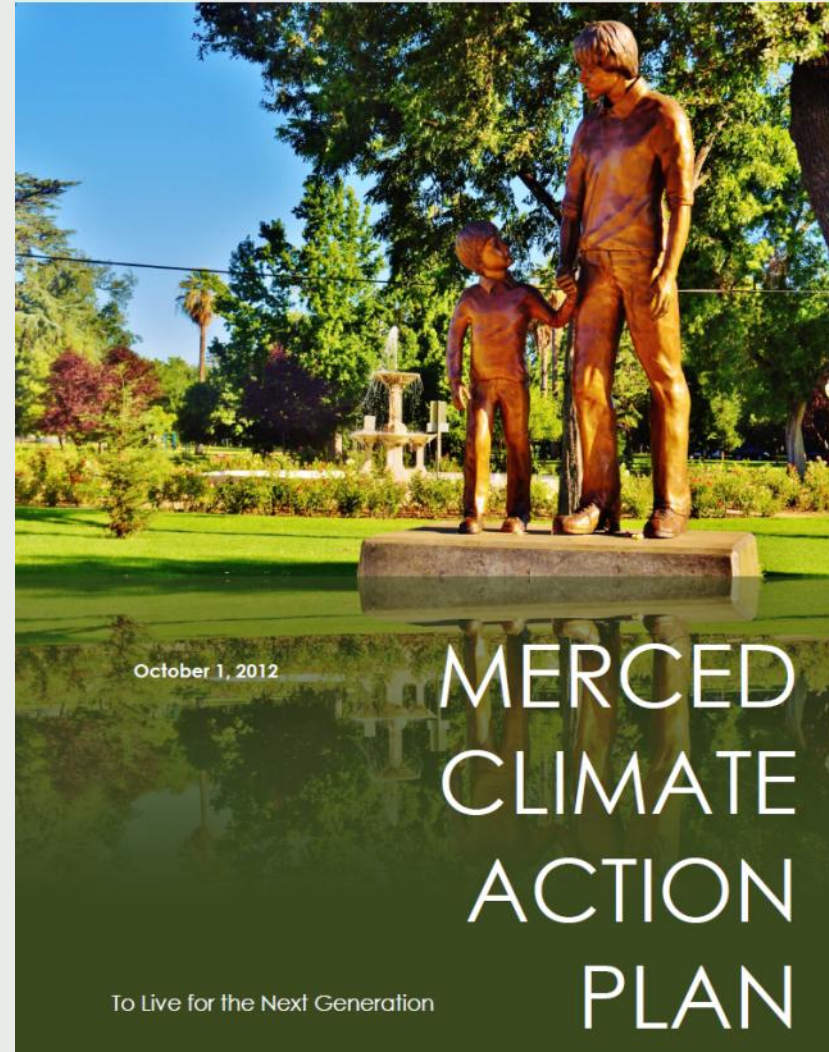
## PCAP Outcomes: CAP Tools





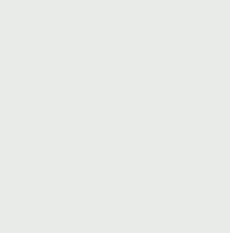
# What are the benefits of CAP tools?

- The tools
  - PCAP
  - Project Options Checklists
  - UDM
  - Monitoring tool
- The benefits
  - Guidance
  - Information
  - Clarify implementation processes





# CITY OF MERCED PROGRAMMATIC CLIMATE ACTION PLAN

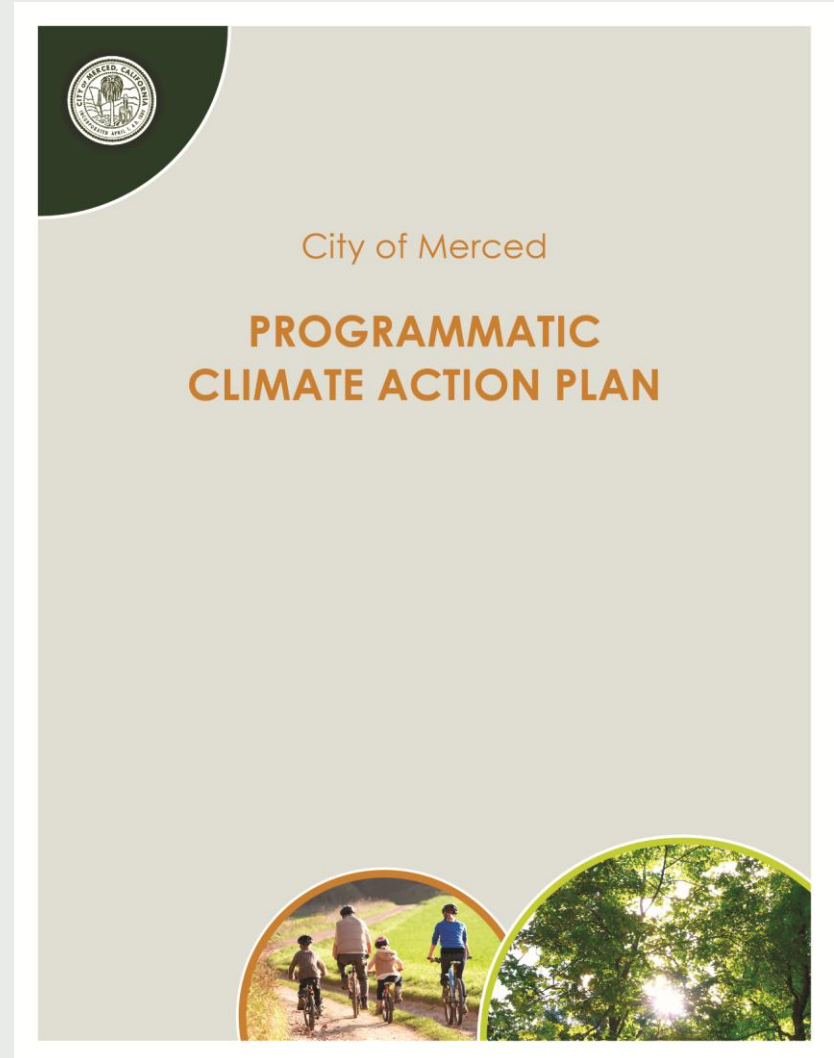


## DRAFT PCAP



# What is the PCAP document?

- The City's local, customized strategy to achieve the adopted CAP target in a manner consistent with state guidance







# Key Parts of the PCAP

1. Summary of plan development
2. Technical and regulatory context
3. Strategies to achieve the GHG reduction target
4. Work plan for City staff
5. Project Options Checklist



*Streamlines permit approval and reduces regulatory barriers*



*Conserves water, clean air, and other resources*



*Helps ensure a healthy living and working environment*



*Takes advantage of clean energy opportunities*

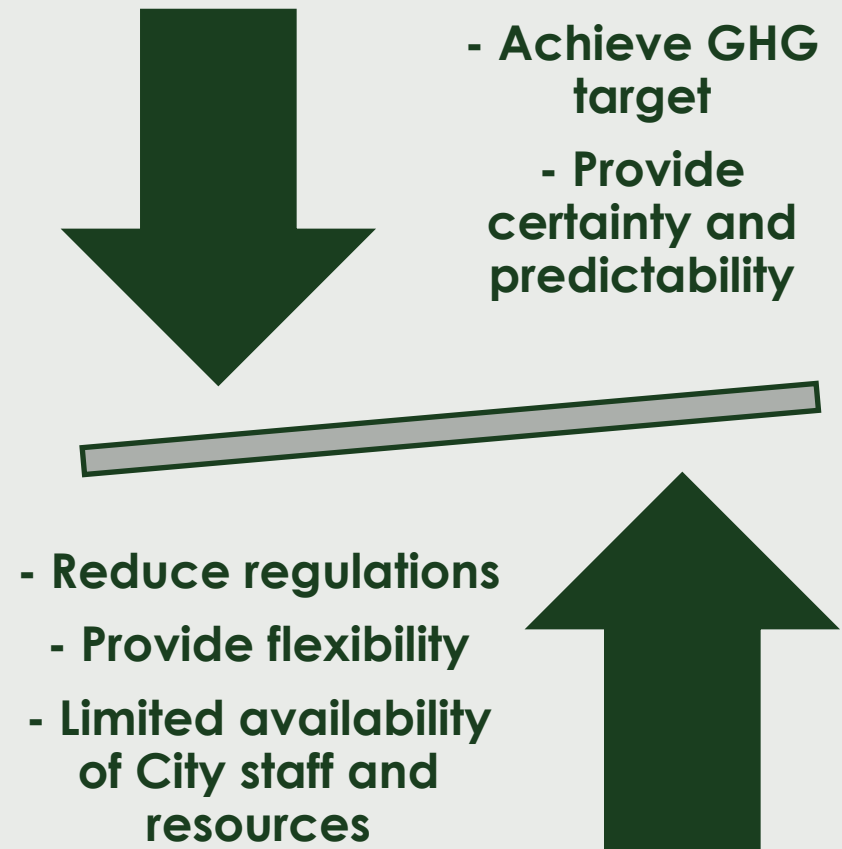


*Saves money for residents and businesses*



# PCAP Approach to Balance Priorities

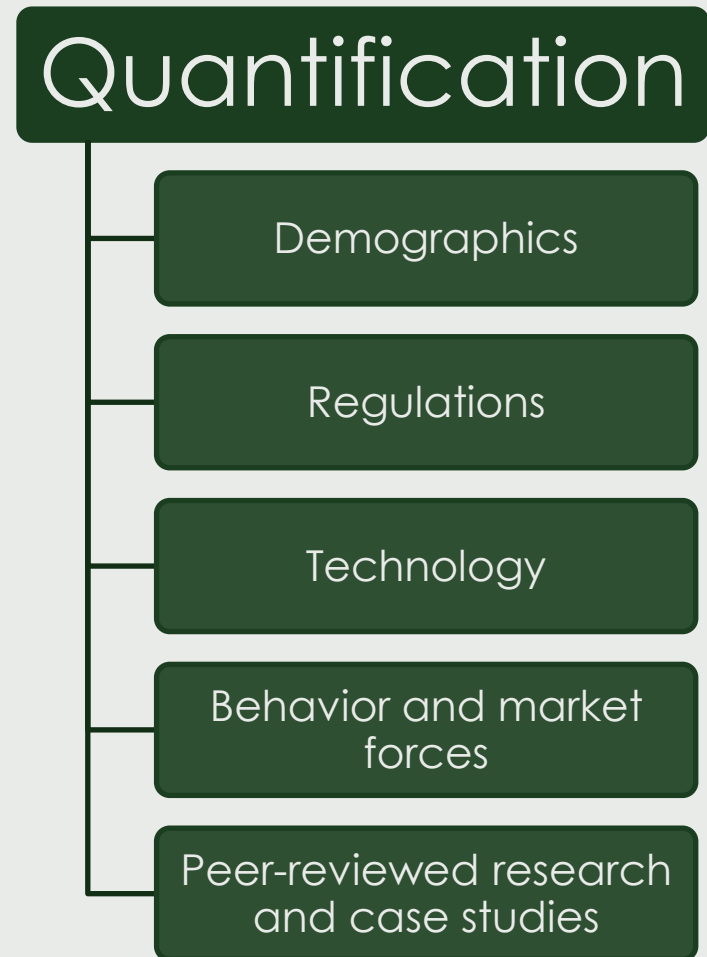
- Council direction is to meet the minimum elements of a qualified CAP for CEQA streamlining





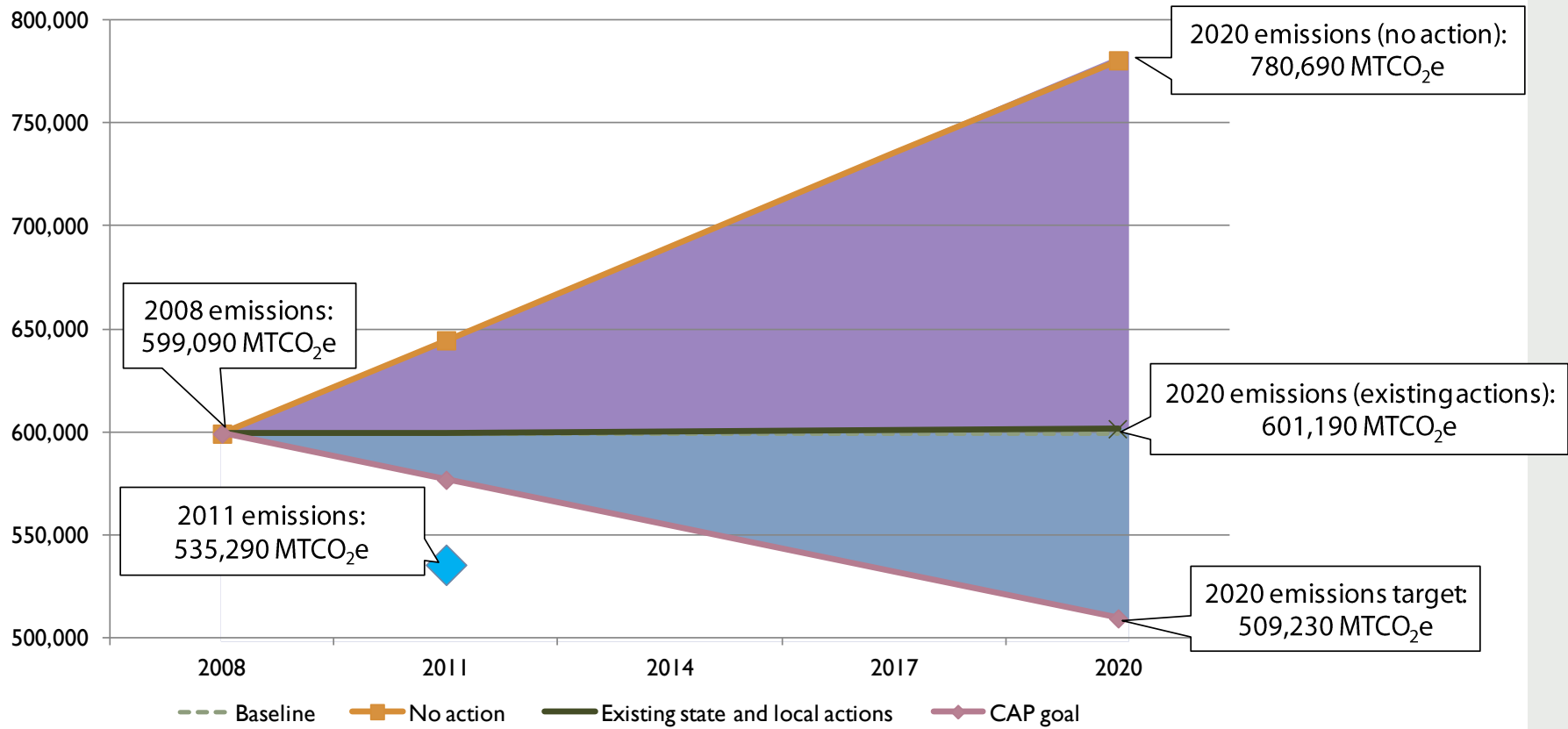
# Technical Data and Assumptions

- PCAP documents technical evidence for CEQA consistency
  - Assumes adopted growth forecasts
  - Analyzes state credits based on existing and anticipated regulations and programs
  - Quantification for measures uses peer-reviewed reports, case studies, and reasonable assumptions
- Provides a monitoring approach to track changes and monitor progress





# PCAP Results (MTCO<sub>2</sub>e)



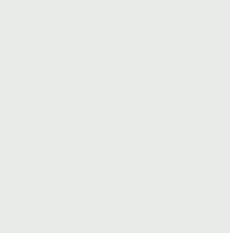


# Focus Group Discussion

- Questions, comments, and input on the draft PCAP (20 minutes)



# CITY OF MERCED PROGRAMMATIC CLIMATE ACTION PLAN



## OTHER CAP IMPLEMENTATION TOOLS



# Project Options Checklists

- Apply to new development projects
- Allow projects to demonstrate consistency with the adopted CAP through menu of options
  - Six residential options
  - Six nonresidential options



*Image by Michael Baker International*





# Project Options Checklists

- Achieve GHG reduction recommended by the SJVAPCD
- Help projects comply with Indirect Source Rule and CEQA
- Integrate with UDM and other resources



*Image by Michael Baker International*





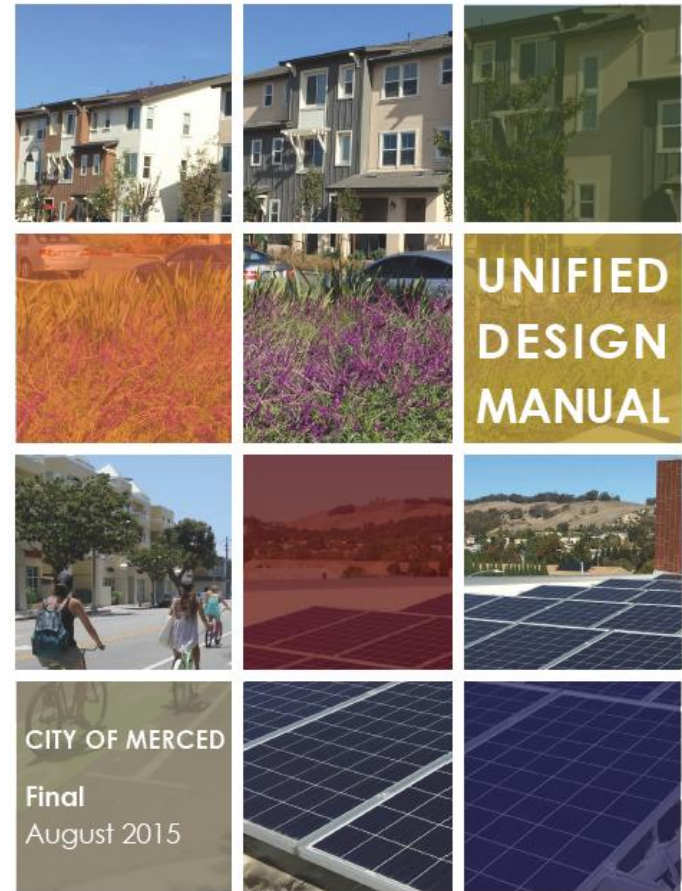
# Focus Group Discussion

- Input and comment on the draft Project Options Checklists (15 minutes)
  - Questions on the new options?
  - Questions on connection between options and the PCAP?



# UDM (Unified Design Manual)

- Provides visual design guidance to help project applicants and City staff implement the PCAP
- Supports the Project Options Checklists and compliance with regulations





# UDM

## 2.2 Pedestrian- and Bicycle-Friendly Street Designs A. Pedestrian Design



\*Complete Street" featuring vehicle, bike, and pedestrians facilities  
\*Intersection

### Intent

Pedestrian street design considerations are intended to promote walking by improving the design and safety of streets for pedestrians.

### Design Considerations

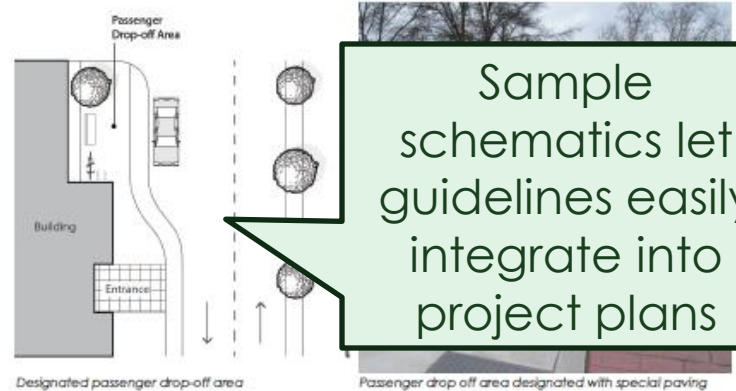
- 1. All streets, "Streets," transport and pedestrian.
- 2. Sidewalks in all new Sidewalks assist in employees.
- 3. Local streets should have travel and parking lanes that are narrow enough to slow traffic, while still providing adequate access for automobiles and for emergency and service vehicles.
- 4. The use of traffic calming devices should be

Pictures give examples of successful design

The intent of the guidelines is clearly spelled out

Design considerations provide details for multiple types of projects

## 3.1 Site Planning for Transit, Bike, & Pedestrian Access F. Passenger Loading & Unloading Areas at Destinations



Sample schematics let guidelines easily integrate into project plans

### Design Considerations

- 1. The provision of designated off-street passenger drop-off and pick-up zones should be considered at major destinations, such as shopping centers and schools, for transit users, pedestrians, and cyclists.
- 2. Amenities should be provided for passenger waiting areas such as shade trees, shelters, benches, newspaper vending machines, and lighting.
- 3. The placement of public transit/bus drop-off areas should be considered within project sites for convenient pick-up and drop-off.
- 4. Passenger loading and unloading areas are encouraged to be co-located with public open spaces such as plazas to allow use of their amenities.
- 5. Land uses with over 100 parking spaces are encouraged to provide a designated passenger loading turn-out area unless another entrance is provided to access from the parking area to

### Intent

Design considerations for passenger loading and unloading areas are intended to create safe and comfortable zones for pedestrians to embark and disembark from public transit, private vehicles, and bicycles.

designed with special paving from the street or sidewalk. interfere with the circulation of area or at building entrances.



# Focus Group Discussion

- Questions, comments, and input on the draft UDM (15 minutes)



# Monitoring Tool

- Allows staff to track CAP implementation
- Estimates GHG emissions in future years
  - Adjusts forecasts to account for changes in population
  - Accounts for anticipated state actions by 2020; allows for entry of additional state action in key sectors



# Monitoring Tool: Data Entry

2013  
Analysis

2008 2009 2010 2011 2012 2013

This works

GHG Anal

Clear labels for what information should go where

annual GHG emissions estimates for ea

Showing multiple years at once allows staff to track changes over time

Key Metrics

2008 2009 2010 2011 2012 2013

**Note:**  
  
Although acreage values have been pre-populated, these can be overwritten as more data becomes available.

	2008	2009	2010	2011	2012	2013
Population	78,107	10,000	30,000		79,352	80,524
Jobs	24,415	5,000	12,000		24,761	25,374
Households	25,229	5,000	14,000		25,657	26,184
Housing units (excluding mobile homes)	24,544	10,000	15,000		24,929	27,486
Residential Acreage	9,948	10,087	10,225	10,364	10,502	10,641
City Area (acres)	20,711	21,039	21,367	21,694	22,022	22,350
City Area (miles)	32.36	32.87	33.39	33.90	34.41	34.92

Activity Data

**PG&E Electricity**  
Source: PG&E Report  
Source: PG&E Fact Sheet  
[<<See Example>>](#)

PG&E Residential Electricity (kWh)	160,462,546	160,462,546	155,000,000			160,462,546
PG&E Nonresidential Electricity (kWh)	126,151,183	126,151,183	120,000,000			126,151,183
PG&E Emissions Factor (lbs CO <sub>2</sub> /MWh)	641	575	575	393	445	575
PG&E Renewable Portfolio Percentage	12.4%	14.1%	17.7%	19.8%	19.0%	23.8%

**MID Electricity**

MID Residential Electricity (kWh)	25,420,988	25,420,988	20,000,000			25,420,988
MID Nonresidential Electricity (kWh)	200,206,438	200,206,438	200,000,000			200,206,438
MID Emissions Factor (lbs CO <sub>2</sub> /MWh)	920	920	920			920

Examples of where and how to obtain data



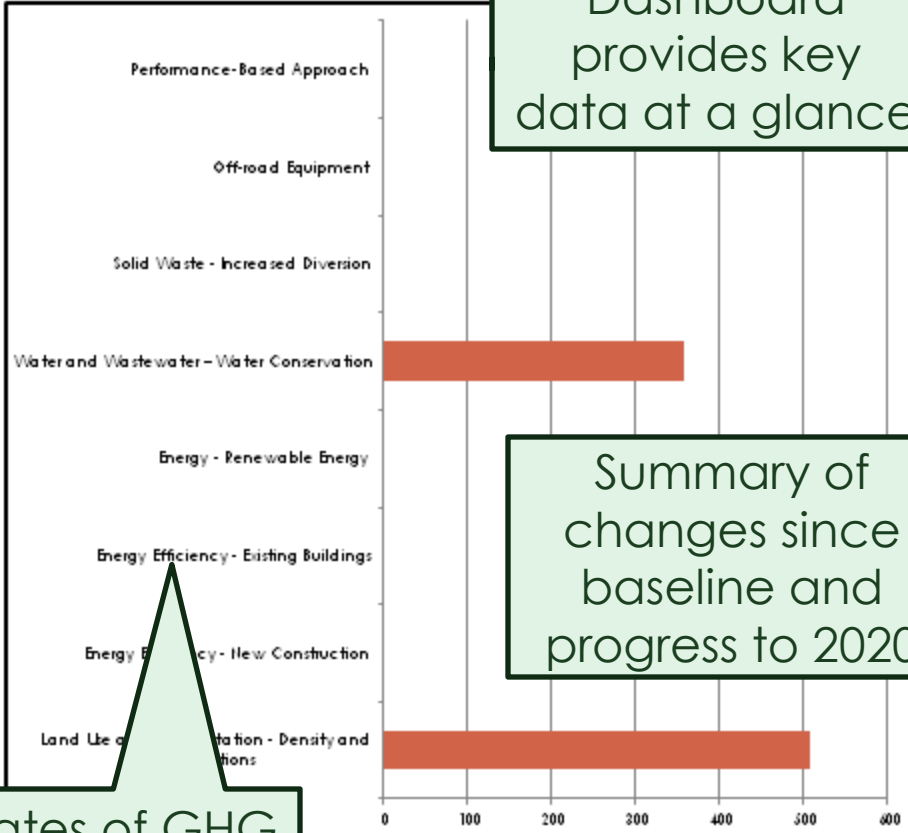
# Monitoring Tool: Dashboard

2013  
Analysis

## City of Merced Programmatic Climate Action Plan - GHG Dashboard (MTCO<sub>2e</sub>)

Annual Summary

2013 GHG Reductions (MTCO<sub>2e</sub>) by Fo



Estimates of GHG reductions by issue area

2013 Summary

<b>473,890</b>	Estimated 2013 GHG Emissions, Based on Measured Activity
<b>561,650</b>	2013 Interim Benchmark towards 2020 Target
<b>-87,750</b>	Difference From 2013 GHG Emissions & 2013 Interim Benchmark
<b>554,000</b>	Estimated 2020 forecast with state reductions, at current growth rates
<b>605,390</b>	2020 forecast with state reductions, at General Plan growth rates
<b>-51,390</b>	Difference in emissions from anticipated General Plan growth rates versus actual growth to date
<b>509,230</b>	2020 reduction target
<b>44,770</b>	Gap between estimated 2020 forecast at current rates with state reductions and targets





# Monitoring Tool: Annual Report

## *About the Programmatic Climate Action Plan*

Annual Report tab provides outline for staff reports on CAP progress, including state efforts

## *The City's Commitment to Addressing Climate Change*

## *The Importance of Monitoring and Reporting Progress*

Places for staff to draft paragraphs on key items

## **II. Annual Community-Wide Greenhouse Gas Emissions Report**

### *Baseline Community-Wide Greenhouse Gas Emissions*

*Table 1 - 2008 Baseline Greenhouse Gas Emissions by Sector, MTCO<sub>2</sub>e*

Sector	MTCO <sub>2</sub> e	Percentage of Total
Residential Energy	115,100	19%
Nonresidential Energy	216,660	36%
On-road Transportation	235,570	39%
Waste	18,750	3%
Off-road Equipment	6,310	1%
Water and Wastewater	6,680	1%
<b>Total</b>	<b>599,070</b>	<b>100%</b>

Tool automatically generates key tables and graphs





# Focus Group Discussion

- Questions, comments, and input on the monitoring tool (10 minutes)



# Zoning Code Index

- Code Index provides recommendations for the future citywide code update, as a resource for City staff
  - No specific Zoning Code updates resulting from PCAP project
  - Instead, PCAP provides Project Options Checklist and UDM to create flexibility and options for new projects



# Zoning Code Index – Future Options

Development Code Index and Unified Design Manual Options to Implement CAP Strategies				
2012 CAP Strategies	Development Code Topics/Categories	Unified Design Manual Topics/Categories	Admin Practices	Other Implementation Tools
CAP Strategies and Actions for New Development (Appendix E)				
Strategy EM 1.5: Mobility Development Review Policies				
EM 1.5.1 (Apply transit standards to new development projects)	ZC - Pedestrian standards, special site design requirements SO – subdivision design	Subdivision design, block lengths, pedestrian access/circulation		TMP, BMP, PMP
EM 1.5.2 (Apply bicycle standards to new development projects)	ZC - Bicycle parking standards and connectivity standards	Bicycle parking design		BMP
EM 1.5.3 (Apply pedestrian standards to new development projects)	ZC - Pedestrian standards, landscape standards	Pedestrian connectivity concepts and design		PMP
EM 1.5.4 (Consider amendments to ordinances for transit shelters, secure bike parking, and pedestrian pathways)	ZC - Bicycle parking standards, pedestrian standards			TMP, BMP, PMP
EM 1.5.4 (Encourage improved accessibility to transit system for projects within 2K ft. of transit stop)	ZC - Pedestrian standards, special site design requirements	Site design concepts for access		
EM 1.5.5 (Ensure multiple access points for new development)	ZC - Pedestrian standards	Site design concepts for access		



# Zoning Code Index - Sample Recommendations

1. Code could expand pedestrian and bicycle connections and circulation standards and include infill compatibility standards
2. Additional setback standards and landscape standards in mixed-use districts could allow for transit-supportive facilities
3. Code could include shade tree requirements for areas outside parking lots
4. Code could add standards for locating and operating small-scale recycling facilities.

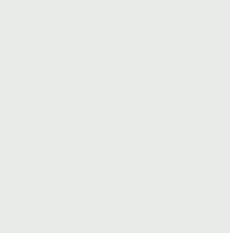


# Focus Group Discussion

- Questions and comments on the Zoning Code Index(5 minutes)



# CITY OF MERCED PROGRAMMATIC CLIMATE ACTION PLAN



## NEXT STEPS



# Questions for Focus Group

- What is your initial feedback on the PCAP and the package of implementation tools?
- What are your questions on how the tools fit together and relate?



# Questions for Focus Group

- Do you believe another Focus Group meeting will be beneficial to review and provide a final recommendation on the documents?
- Are you ready to provide a final recommendation today?





## Next Tasks

- Project team will update draft documents, based on input from the Focus Group and City staff
- City staff will initiate preparation of environmental review document for PCAP and UDM
- One final Focus Group meeting, as needed, to review updated documents prior to recommendation to the City Council



# Schedule

- **Thursday, 9/24: Focus Group provides any additional written comments on documents to Bill**
- Mid to late October: release updated PCAP and UDM
- November: potential final Focus Group meeting, as needed
- December: release final draft PCAP and UDM
- Early 2016: City Council hearing



# Thank You

Please use comment cards for any additional thoughts you'd like to share. You can also provide any additional thoughts later by e-mail directly to Bill King.

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