

Item 9: Transportation Demand Management

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Background

- Green Affordable Housing Package and Citywide Green Development Standards referrals
- Planning Commission Meeting: July 17, 2019

Approaches to TDM

Private Vehicle Trip Reduction

Primary Goal: Reduce private vehicle trips

Primary Strategy: Reduce off-street vehicle parking

Role of TDM Measures: Encourage use of bikes, carshare and transit to supplement trip reductions achieved through reduced off-street parking

***Bottom Line:* Less parking means less TDM**

Community Benefits

Primary Goals: Manage “spillover” on-street parking and secure compensation for relaxed land use requirements for projects that propose less parking than required

Primary Strategy: Provide TDM measures

Role of TDM Measures: To encourage the use of bikes, carshare and transit to reduce “spillover” on-street parking and to compensate for reduced land use requirements

***Bottom Line:* Less parking means more TDM**



Frameworks for TDM Programs

- Both approaches apply to projects of 10 or more units .
- Both approaches include required *unbundled parking* and *on-site bicycle parking*.
- Both approaches are based on four strategies
 - a. Parking supply
 - b. Transit passes
 - c. Carshare memberships and spaces
 - d. Bikeshare memberships
- TDM benefits are offered for 10 years
- Both approaches include versions with *minimum parking requirements* and with *parking maximums*.

Vehicle Trip Reduction (Parking Minimums)

A project is required to obtain **8 points** from this menu

**Table 1. TDM Measures for Vehicle Trip Reduction Approach
(Parking Minimums)**

TDM Measure	Points
Vehicle Parking Supply	
100% of required parking	0
75% of required parking	2
50% of required parking	4
25% of required parking	6
No parking	8
Every five additional spaces above required parking, rounded up ¹	-2
Transit Passes	
50% of cost	2
100% of cost	4
Carshare Membership	
Carshare parking space	2
Carshare membership for each resident	2
Bikeshare Membership	
Free membership with bikeshare pod farther than 1000ft from project site	2
Free membership with bikeshare pod within 1000ft of project site	4

¹ Any additional spaces beyond required spaces must be conditioned and designed for conversion to dwelling units.

Vehicle Trip Reduction (Parking Maximums)

A project is required to obtain **4 points** from this menu

**Table 2. TDM Measures for Vehicle Trip Reduction Approach
(Parking Maximums)**

TDM Measure	Points
Vehicle Parking Supply	
No parking	4
Transit Passes	
50% of cost	2
100% of cost	4
Carshare Membership	
Carshare parking space	2
Carshare membership for each resident	2
Bikeshare Membership	
Free membership with bikeshare pod farther than 1000ft from project site	2
Free membership with bikeshare pod within 1000ft of project site	4



Community Benefits (Parking Minimums)

A project is required to obtain **10 points** from this menu

**Table 3. TDM Measures for Community Benefits Approach
(Parking Minimums)**

TDM Measure	Points
Vehicle Parking Supply¹	
100% or more of required parking	8
75% of required parking	6
50% of required parking	4
25% of required parking	2
No parking	0
Transit Passes	
50% of cost	2
100% of cost	4
Carshare Membership	
Carshare parking space	2
Carshare membership for each resident	2
Bikeshare Membership	
Free membership with bikeshare pod farther than 1000ft from project site	2
Free membership with bikeshare pod within 1000ft of project site	4
¹ Any additional spaces beyond required spaces must be conditioned and designed for conversion to dwelling units.	

Primary Difference: Treatment of Off-Street Parking

Vehicle Parking Supply	Vehicle Trip Reduction	Community Benefit
100% of required parking	0	8
75% of required parking	2	6
50% of required parking	4	4
25% of required parking	6	2
No parking	8	0



Community Benefits (Parking Maximums)

A project is required to obtain **4 points** from this menu

**Table 4. TDM Measures for Community Benefits Approach
(Parking Maximums)**

TDM Measure	Points
Transit Passes	
50% of cost	2
100% of cost	4
Carshare Membership	
Carshare parking space	2
Carshare membership for each resident	2
Bikeshare Membership	
Free membership with bikeshare pod farther than 1000ft from project site	2
Free membership with bikeshare pod within 1000ft of project site	4
Parking Supply	
Every 5 spaces above the maximum, rounded up	- 2

Cost of TDM Measures

TDM Measure	Estimated Cost per Unit for 10 Years
Carshare membership¹	(\$7.00/month x 12 months x 10 years) x 2 adults= \$1,680
Bikeshare membership²	(\$149/year x 10 years) x 2 adults= \$2,980
Transit Passes³	
100% subsidy	(\$84.60/month x 12 months x 10 years) x 2 adults= \$20,304
50% subsidy	\$10,152
AC Transit Easy Pass ⁴	(\$100/year X 10 years) x 2 adults= \$2,000
<p>¹ Zipcar monthly membership, https://www.zipcar.com/pricing. Accessed September 17, 2019</p> <p>² Bay Wheels Annual Membership, https://www.lyft.com/bikes/bay-wheels/pricing. Accessed September 17, 2019.</p> <p>³ AC Transit 31-day adult pass, http://www.actransit.org/actrealtime/fares-tickets-passes/. Accessed September 17, 2019</p> <p>⁴ Only available for residential developments of 100 units or more</p>	



100% residential
 70 units (54,000 sf)
 On Telegraph Avenue (C-1)
 C-1 Parking minimum: 1 space per 1,000 sf: 54 spaces
 Proposed parking: 27 spaces

Sample Project

Community Benefit Approach

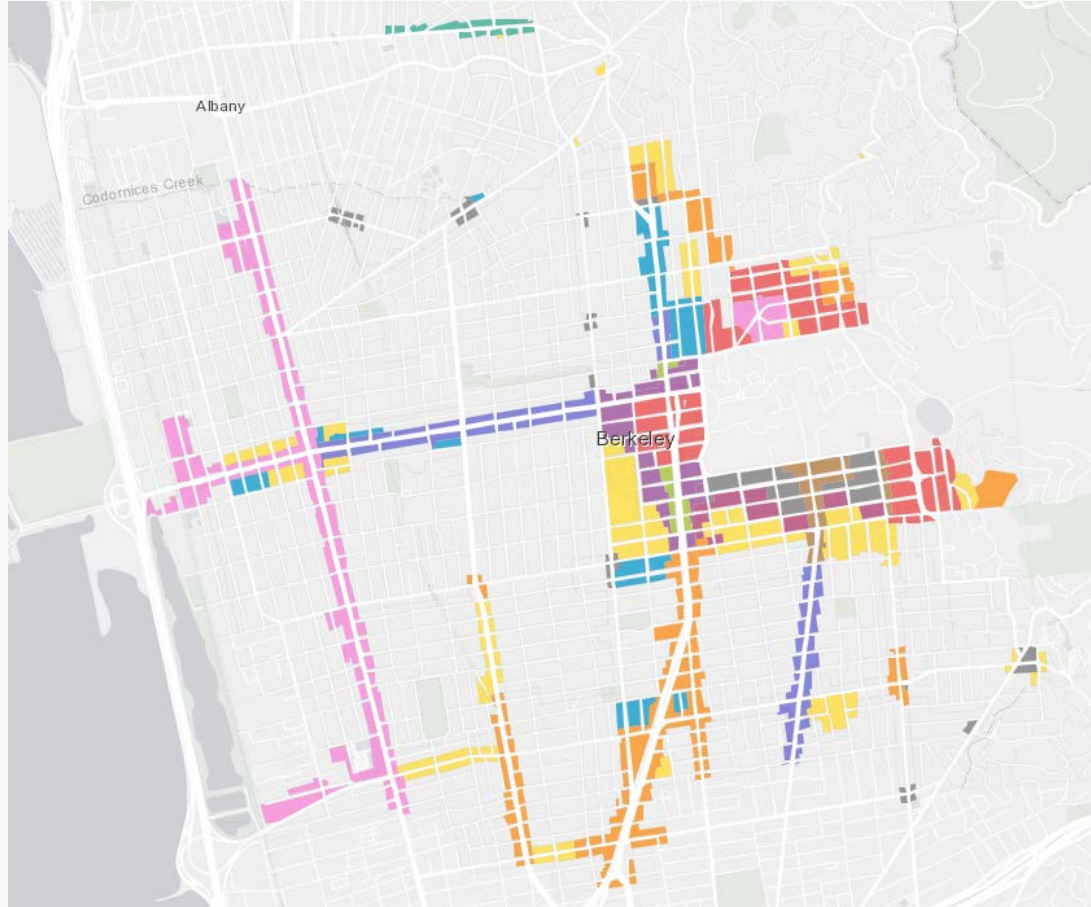
Measure	Points	Cost
50% of required parking	4	
Carshare parking space	2	\$35,000
Free bikeshare memberships more than 1,000 ft from a pod	2	\$208,600
Free carshare memberships	2	\$117,600
TOTAL	10	\$361,200

Cost of 54 required parking spaces	\$1,890,000
Cost of 27 parking spaces	\$ 945,000
Cost of TDM measures	\$ 361,200
<hr/> Total	\$1,306,200
 Overall savings	 \$ 583,800

Priority
Questions for
Planning
Commission
Discussion

- Is staff generally moving in the right direction with this proposal?
- Does the Planning Commission prefer a Vehicle Trip Reduction approach or a Community Benefits approach?
- Where should a requirement apply?

Possible Applicable Areas (R-3 +)

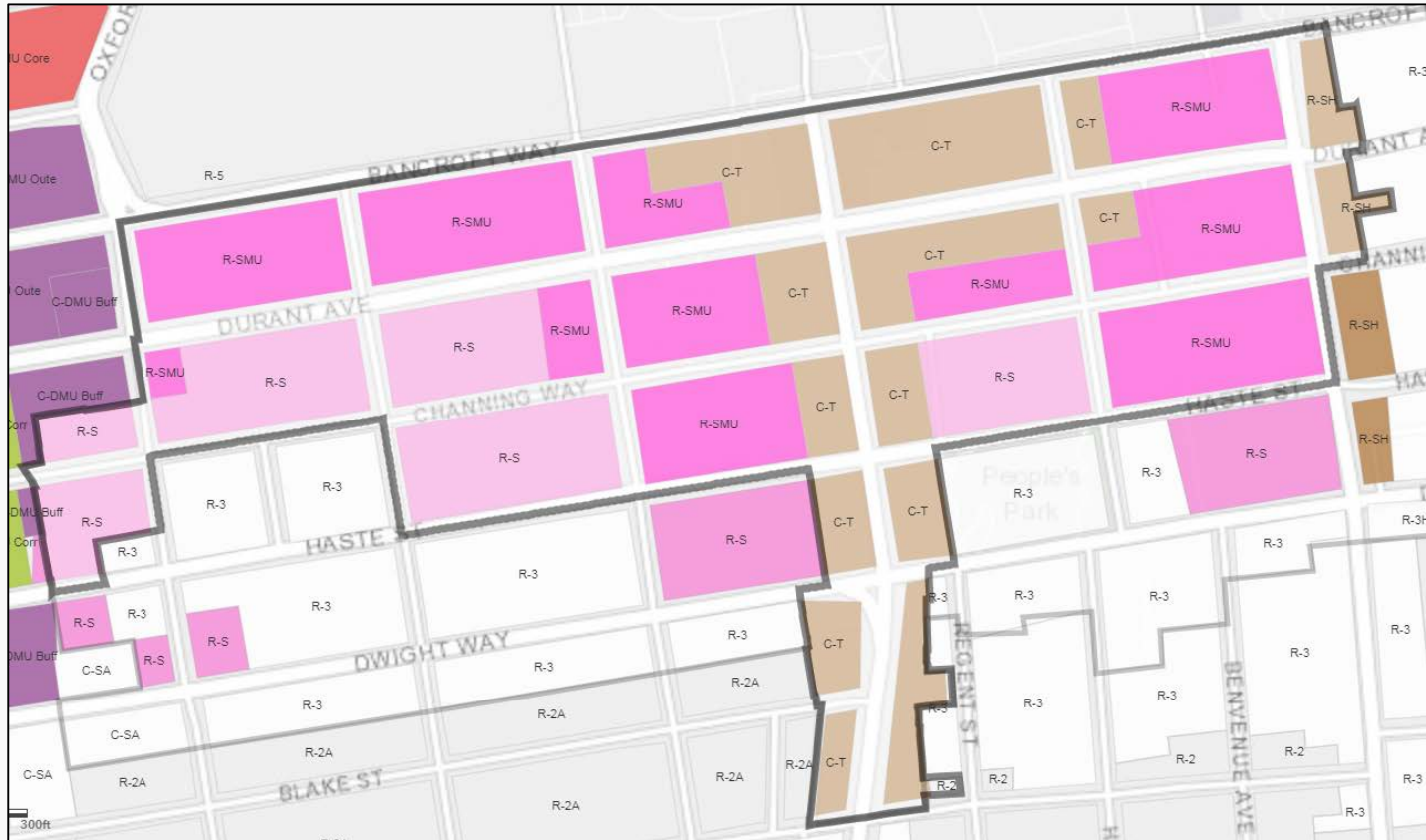


C-DMU



- One required parking space per 3 dwelling units
- Can be reduced by payment of in-lieu fee and UP.
- Unbundled parking required
- For projects 20,000 sf or greater, one of the following must be offered to each unit:
 - Unlimited local bus pass; or
 - Transit benefit equal to unlimited local bus pass

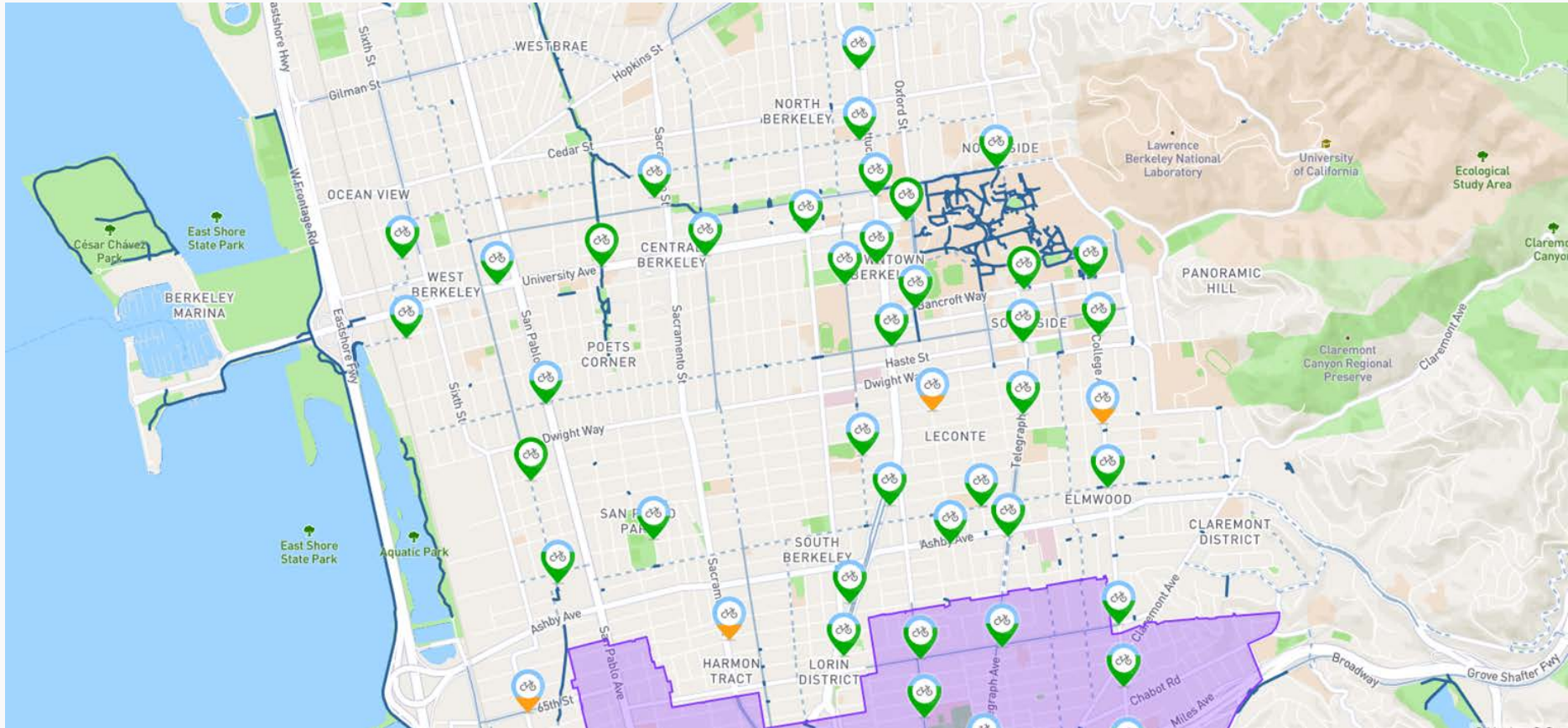
Southside Car Free Overlay



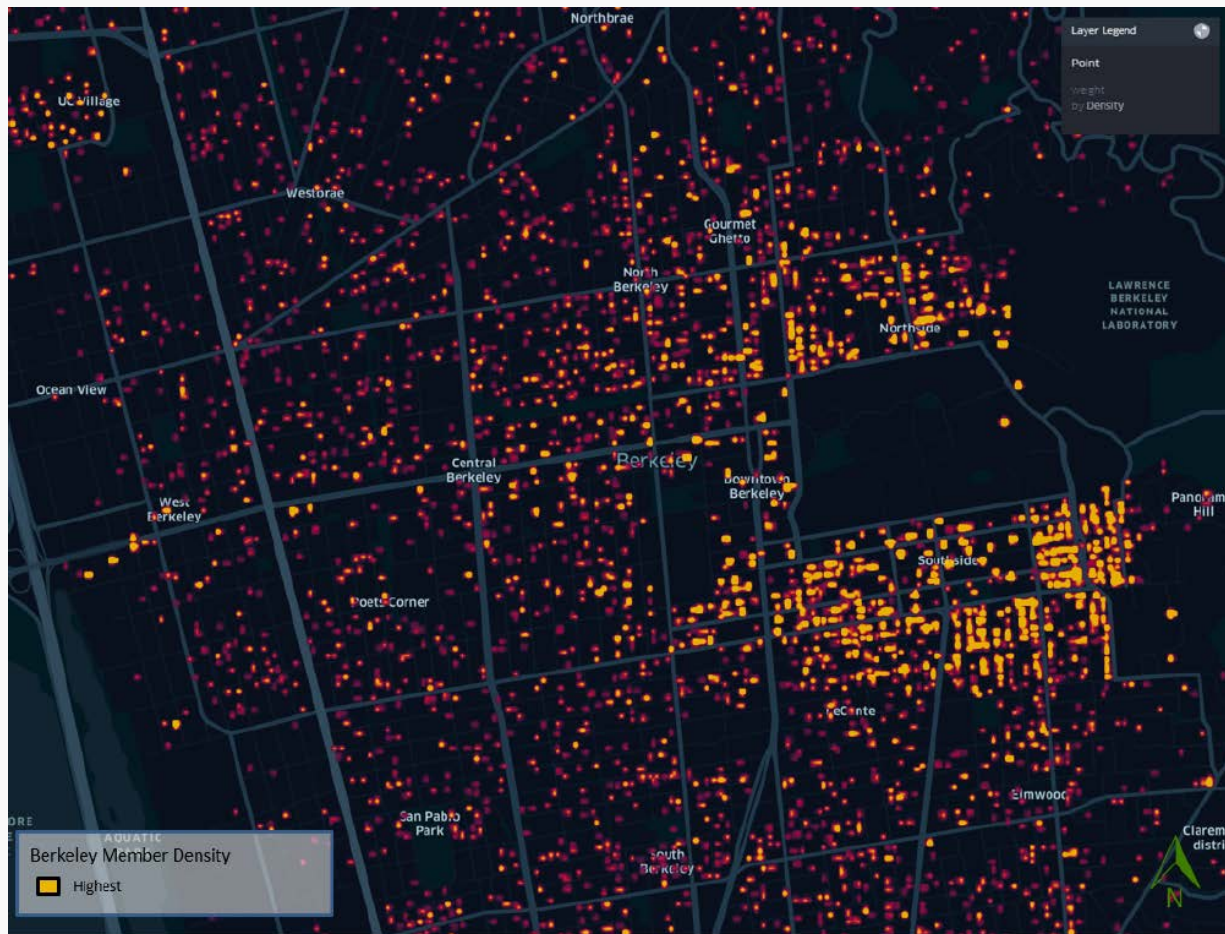
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37 Bay Wheels Hubs in Berkeley



Gig Car Share



8,005 Berkeley members
(28% of total Bay Area membership)

Average of 47% of Gig fleet operates in Berkeley

40,622 total trips (48% of all Bay Area trips) originate in Berkeley

Median number of trips per car per day: 2.35

Median trip length: 2.5 miles

1/4 Mile from Transit Hubs and Corridors

