



SOV Feebate Policy to Cap SOV Commuting at 40%

TDM Program Research Memo, 7/3/23

Summary

Single Occupancy Vehicle (SOV) Feebate is a high-impact, comprehensive low- or no-cost employer TDM strategy. The word “feebate” is a combination of “fee” and “rebate.” The Gates Foundation has implemented a daily \$12/day SOV fee combined with a \$3/day non-SOV rebate, transacted through employee paychecks, reducing SOV mode share to 36%.¹ Stanford University’s SOV Feebate eliminated the need for \$107M in new parking structures.² The Bay Area Metropolitan Transportation Commission’s (MTC) [SHIFT Program](#) accelerated the adoption of Employer Commute Management Platforms, facilitating the implementation of SOV Feebate.³ [Plan Bay Area 2050](#) policy EN7 caps SOV commuting at 40% mode share by 2035.⁴ SOV Feebate is one of a handful of regionally-scalable strategies to achieve EN7.

Some employers have adopted SOV Feebate in response to strong public sector TDM policies. In addition, as an outcome of a specific plan or entitlement process, a City may reserve the right to impose this policy on specific projects. SOV Feebates vary with each implementation, with a variety of goals, commute alternative options, fees, and rebates. Total fee revenue can be set to match total rebates or, in the Gates Foundation example, can even generate a net surplus for the employer. Provided is a method for the City of East Palo Alto to gradually impose a low-cost-to-employer SOV Feebate on the [Ravenswood Business District \(RBD\) Specific Plan](#) area.

SOV Feebate can make the office real estate and ground transportation markets more efficient by internalizing [negative externalities](#) such as traffic, pollution, and greenhouse gas emissions. As an example of market inefficiency, an employer may operate a parking structure with an all-in cost of \$25/day/space. The employer freely gives away these valuable spaces to SOV commuters while providing a \$0/day incentive to bicycle commuters, effectively subsidizing SOV commuting at the expense of greener modes. Feebates can reduce greenhouse gas at a negative cost; one had a negative cost of \$558/ton CO₂ reduced.⁵

¹<https://mobilitylab.org/transportation-demand-management/commuter-services/bill-melinda-gates-foundation-cuts-solo-driving-with-employee-programs/>

² \$107M savings per “TDM at Stanford University,” Slide #24, August 2013. <http://bit.ly/1RCmSS2>. As of 2016, Stanford has gone away from calculating parking savings. Stanford has fewer parking spaces in 2016 than it had in 2001.

³ MTC SHIFT vendors include Luum: <https://go.luum.com/commuter-benefits-management/commute-management/>, RideAmigos: <https://rideamigos.com/>, and RideShark.

⁴ https://www.planbayarea.org/sites/default/files/Final_Blueprint_-_Revised_Strategy_EN7.pdf

⁵ Reduce Bay Area Commuting 25%, Section 10F, www.cities21.org/wp.pdf

RBD SOV Feebate With 48-month Phase-in

The Ravenswood Business District (RBD) Specific Plan may result in 679 housing units and 4M square feet of office and life science. RBD will create a Transportation Management Association (TMA). If the RBD is noncompliant with the RBD Trip Cap for a Council-specified duration, City Council has the option to enact this high-impact SOV Feebate to ensure that RBD becomes compliant.

Impacted RBD employers shall reduce SOV commuting by their employees. Implementation sets employer SOV performance targets that commence at 80% and shrink to 40% over 48 months, shrinking by 2.5% each quarter. Employers shall install one RBD-wide Employer Commute Management Platform. RBD Trip Cap non-compliance produces a gradually increasing daily SOV fee (\$0.50 increments per quarter, \$8.00 maximum). An employer that reaches the \$8.00 maximum without RBD achieving the Trip Cap target does not have to raise the SOV fee further. Within each employer, the non-SOV feebate amount is set so that fee revenue matches rebate expenditure. The TMA and employers should understand that there is an additional cost for the Employer Commute Management Platform. Once RBD is compliant, SOV fee increases can be eliminated.

For an always-non-compliant RBD employer, employees experience a gradually increasing SOV fee:

	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026	Q1 2027	Q2 2027	Q3 2027	Q4 2027	Q1 2028	Q2 2028	Q3 2028	Q4 2028	Q1 2029
Fee	\$0.00	\$0.50	\$1.00	\$1.50	\$2.00	\$2.50	\$3.00	\$3.50	\$4.00	\$4.50	\$5.00	\$5.50	\$6.00	\$6.50	\$7.00	\$7.50	\$8.00
Tgt SOV	80.0%	77.5%	75.0%	72.5%	70.0%	67.5%	65.0%	62.5%	60.0%	57.5%	55.0%	52.5%	50.0%	47.5%	45.0%	42.5%	40.0%

Over 16 quarters (48 months), the daily SOV fee increases from \$0.00/day to \$8.00/day, and the employer's target SOV commute mode share decreases from 80% to 40%.

A single TMA-wide Employer Commute Management Platform provides compelling efficacy benefits compared to the implementation of multiple platforms within RBD:

- The single platform enables geo-targeted marketing of non-SOV options to employees working at adjacent employers, increasing the number of compatible commuters.
- Workflow automation enables lower-cost, more efficient geo-targeted persuasive messaging.
- The single platform eases the anonymized, data-protected aggregation of individual employer commute dashboards to be provided as an RBD-wide dashboard to The City.

City of East Palo Alto staff and the TMA shall collaborate on the detailed SOV Feebate implementation, tracking “case law” created for specific scenarios. The TMA shall provide an RBD-wide public-viewable daily commute mode dashboard for The City and residents to monitor. [Transportation Analysis Zone \(TAZ\)](#) commute shed data shall be provided to the City.

Employer Facilities Managers understand that giving away \$25/day/space structured parking spaces to SOV commuters while providing \$0/day to bicycle commuters is economically irrational but feel trapped into this model. The imposition of SOV Feebate by the public sector, rather than the controversial voluntary adoption of SOV Feebate by a suburban employer, eliminates this irrationality in a manner that may be more palatable to Facilities Managers.

The SOV Feebate policy is complex. For social equity, SOV Feebate represents a net wealth transfer from higher-income to lower-income commuters. A FAQ is available upon request.

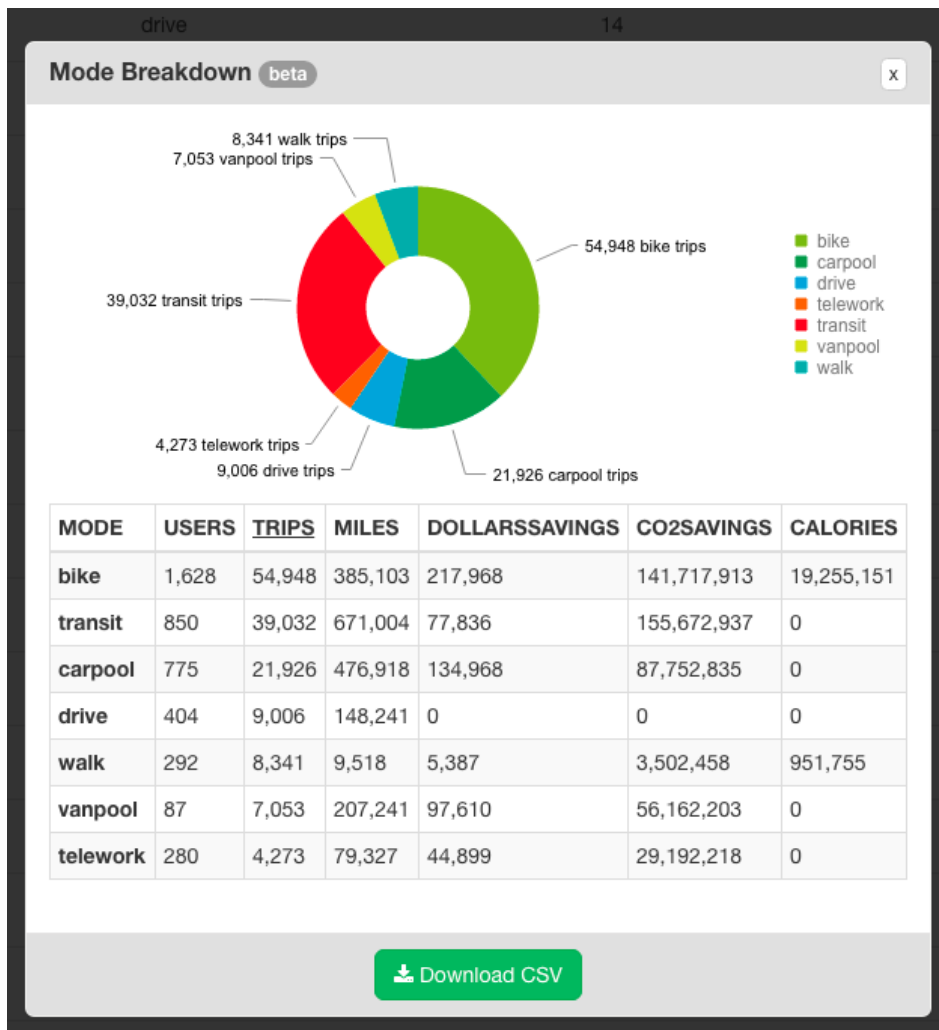
Employer Commute Management Platform software

MTC's SHIFT grant program gives large employers funding and tools to reduce and track drive-alone rates. The program funds up to 75% of setup and three-year subscription costs for Luum, RideAmigos, and RideShark.

These platforms:

- Provide employer-wide commute mode dashboard to measure changes in workers' drive-alone rates and greenhouse gas reduced.
- Integrate with employer payroll and human resource systems (ADP, Gusto, Paychex, Workday, Oracle, SAP, Ceridian, etc.) to manage commute benefits and incentives.
- Integrate partially with MTC's Clipper transit mobile app.
- Integrate with third-party commute alternative apps such as Scoop, Waze Carpool, Lyft, and Strava.
- Administer parking-management strategies and integrate with parking structure hardware.
- Follow robust data protection and privacy standards to protect worker data. Employer senior staff will not be able to access data on individual trips by individual employees. Only anonymized, aggregated data is exposed to the employer.
- With employee permission, automate employee reporting of commute mode into their commute calendar.
- Automate portions of employer TDM programs.
- Provide an equity-increasing capability to provide larger rebates to lower-income workers.
- Provide chat forums to discuss bicycling, Caltrain, SamTrans bus, electric scootering, ridesharing, Dumbarton traffic, etc.
- Improve new employee onboarding to form green commute habits from the first workday/

Commute Mode Dashboard



A portion of RideAmigos' daily commute mode dashboard summarizing all employee commutes

Per-employee Commute Calendar

A per-employee commute calendar supports daily commute mode reporting and provides an accounting of fees versus rebates reflected in paychecks. Employees may self-report commute mode into their calendar each day or may opt-in to automated mode detection to save time.

The screenshot shows the 'Commute Calendar' interface for Seattle Children's Hospital, powered by Lum. The user is logged in as 'Jamie'. The calendar is for February 2015. The interface includes a navigation bar with 'Home', 'Commute Options', 'Resources', 'Shuttles', and 'Commute Calendar'. The calendar grid shows days from Sunday to Saturday with icons representing commute modes: bicycle, bus, car, train, walking, and a 'P' for parking. A summary box on the right for 'Wednesday, March 18, 2015' shows 'No trips for this day.' and a 'Pay Period Summary: Mar 16 - Mar 29' with a 'CHARGE (\$3.00)' and a 'BONUS \$8.00'. A blue oval highlights the charge and bonus amounts. Below the calendar, there is a 'Modes' section with a 'Distance (one-way): 1.4 mi' and a row of icons for different commute modes.

Luum's per-employee commute calendar is shown for Seattle Children's Hospital. The blue oval shows a \$3 Charge and \$8 Bonus (fee/rebate) that is brought into the employee's paycheck.