

Slide 1 – Title Slide – SFMTA – Municipal Transportation Agency. Title of presentation “Presentation to the Board of Directors on DriveCam Program:

Slide 2 – Title of Slide is “DriveCam Program Summary”.

Summary and Results”, June 28, 2011, San Francisco, CA

Basics of DriveCam Technology and the SFMTA Deployment:

- Cameras installed on all buses October 2009
- Recording is triggered by G-force event (hard braking, swerving, etc.)
- Records eight seconds before and four seconds after G-force event

Image on the right shows a picture of how the DriveCam device is mounted on the center-top portion of the bus’s windshield, and a second picture shows how the DriveCam technology records two images through the use of two cameras – one camera facing inside the bus and another facing the road ahead of the bus.

Slide 3 – Title of Slide is “DriveCam Program Summary (continued)”

Text bullets describe the use of DriveCam data by the SFMTA:

- Events reviewed by SFMTA Safety staff
- High risk events (near collisions, following too closely, etc.) are scored and forwarded to divisions for corrective action and/or operator retraining

Image on the right is of a SFMTA employee using DriveCam’s Internet-based online portal, DriveCam Online.

Slide 4 – Title of Slide is “DriveCam Program Results”

Single graph on slide Severity (“Total Risk Score per Vehicle per Month”) and Frequency (“Total Scored Events per Vehicle per Month” by month since the program inception.

Summary of what key points from the graph:

- Steady improvement since Program Launch in Oct 2009
- Over time period Q4 '10 to Q1 '11: 66% improvement in frequency and severity

Graph Data:

Month	Total Risk Score Per Vehicle per Month	Scored Events per Vehicle per Month
Jan-10	5.35	1.29
Feb-10	3.66	0.86
Mar-10	3.70	0.83
Apr-10	3.17	0.74
May-10	3.15	0.74
Jun-10	2.91	0.68
Jul-10	2.69	0.63
Aug-10	2.84	0.62
Sep-10	2.67	0.58
Oct-10	2.32	0.51
Nov-10	2.08	0.48
Dec-10	2.53	0.56
Jan-11	3.19	0.76
Feb-11	2.53	0.59
Mar-11	2.51	0.59

Slide 5 – Title of Slide: “DriveCam Program Results (continued) “.

Single Graph on Slide showing Risk Trends (Severity) by District, Total Score per Vehicle per Month

Summary Take-Away is that Improvement has been consistent across all divisions.

Graph Data:

Month	Flynn	Kirkland	Potrero	Presidio	Woods	SFMTA Total
Apr-10	1.71	4.97	2.15	1.20	4.89	3.17
May-10	1.81	4.75	1.29	1.10	5.45	3.15
Jun-10	1.72	3.83	1.66	0.89	5.10	2.91
Jul-10	1.56	3.50	1.75	0.75	4.68	2.69
Aug-10	1.80	3.92	1.46	0.89	4.77	2.84
Sep-10	1.66	2.45	1.27	1.26	4.09	2.67
Oct-10	1.74	2.35	1.40	0.58	3.03	2.32
Nov-10	0.99	2.79	1.01	0.63	2.76	2.08
Dec-10	1.83	2.71	1.32	1.15	3.43	2.53
Jan-11	1.79	3.25	1.36	1.11	4.65	3.19
Feb-11	1.41	2.63	1.73	0.70	3.45	2.53
Mar-11	1.11	2.68	1.10	0.71	3.98	2.51

Slide 6 – Slide Title, “DriveCam Program Results (continued): Risky Driving Behavior Trends”

Slide has 4 graphs showing trends in Riskiest Driving Behavior Incidence (per vehicle per month), and Improvements since Program Inception

Graph 1: Avoidable Near Collisions: 56% improvement from Q4 2009 (the first quarter of DriveCam deployment) to Q1 2011 (the most recent quarter)

Month	Avoidable Near Collisions per Month per Vehicle
Oct-09	0.28
Nov-09	0.13
Dec-09	0.14
Jan-10	0.09
Feb-10	0.08
Mar-10	0.10
Apr-10	0.07
May-10	0.07
Jun-10	0.08
Jul-10	0.07
Aug-10	0.10
Sep-10	0.10
Oct-10	0.08
Nov-10	0.06
Dec-10	0.08
Jan-11	0.10

Month	Avoidable Near Collisions per Month per Vehicle
Feb-11	0.07
Mar-11	0.07

Graph 2: Rolling Stops, Stop Signs, Red Lights: 90% improvement from Q4 2009 (the first quarter of DriveCam deployment) to Q1 2011 (the most recent quarter)

Month	Rolling Stops, Stop Signs, and Red Lights per Month per Vehicle
Oct-09	1.05
Nov-09	0.80
Dec-09	0.78
Jan-10	0.53
Feb-10	0.32
Mar-10	0.30
Apr-10	0.25
May-10	0.27
Jun-10	0.26
Jul-10	0.25
Aug-10	0.21
Sep-10	0.20
Oct-10	0.15
Nov-10	0.11
Dec-10	0.10
Jan-11	0.10
Feb-11	0.09
Mar-11	0.07

Graph 3: Awareness / Late Reaction: 67% improvement from Q4 2009 (the first quarter of DriveCam deployment) to Q1 2011 (the most recent quarter)

Month	Awareness / Late Reaction per Month per Vehicle
Oct-09	0.69
Nov-09	0.57
Dec-09	0.50
Jan-10	0.49
Feb-10	0.31
Mar-10	0.27
Apr-10	0.25
May-10	0.27
Jun-10	0.17
Jul-10	0.19
Aug-10	0.21

Month	Awareness / Late Reaction per Month per Vehicle
Sep-10	0.19
Oct-10	0.19
Nov-10	0.16
Dec-10	0.23
Jan-11	0.23
Feb-11	0.21
Mar-11	0.15

Graph 4: Following Too Close: 72% improvement from Q4 2009 (the first quarter of DriveCam deployment) to Q1 2011 (the most recent quarter)

Month	Following Too Close per Month per Vehicle
Oct-09	0.40
Nov-09	0.27
Dec-09	0.29
Jan-10	0.25
Feb-10	0.19
Mar-10	0.21
Apr-10	0.22
May-10	0.20
Jun-10	0.15
Jul-10	0.12
Aug-10	0.14
Sep-10	0.11
Oct-10	0.13
Nov-10	0.08
Dec-10	0.08
Jan-11	0.10
Feb-11	0.09
Mar-11	0.08

Slide 7 – Slide Title, “DriveCam Program Results (continued) – 2009 vs. 2010 Bus Collision History”

Slide contains a Table by Year and Month showing Bus Collisions and the Variance by Month

Table Data: SFMTA Bus Collisions

Month	2009	2010	% Difference
July	106	101	-4.7%
August	103	91	-11.7%
September	121	103	-14.9%
October	121	98	-19.0%
November	81	89	+9.9%
December	111	102	-8.1%