

# Implement DriveCam Procedures



Project Start: 1/11/2012  
Project Revision:  
Project Champion: Dan Brotton  
Black/Green Belt: Drew Brown





## \$230 Billion in Collision-Related Costs Annually

*Affecting your city's reputation, budget and lost jobs*



- **Every 5 seconds**, there is a traffic collision in the United States.
- **Every 12 minutes**, someone dies in a traffic collision.
- **Every hour**, \$25 million is spent on collision-related expenses.
- **33% of all accidental deaths** are caused by traffic collisions.

**90 %** of all collisions are avoidable - and are usually caused by bad driving decisions \*

Source: National Highway Traffic Safety Administration (NHTSA).

\*Indiana Tri-Level Study (Treat et al., 1979) found 90.3 percent of crashes involved at-risk driver behavior



## Problem Statement

As an organization, we are experiencing a problem with accidents and incidents. The area where the problem is occurring is in the Solid Waste Department. The problem has existed for at least 3 years. The magnitude of the problem is claims cost are too high and continue to grow. The effect this problem is having on our business is financial due to the increased number and severity of the events. This is costing an average of \$39,463.33 in Property and Causality claims alone per year.



## Project Objective

Reduce the cost of the claims generated by the Solid Waste Department.



**The City of Tyler Solid Waste Department**  
Property and Causality Claims Cost

<b><u>Year</u></b>	<b><u>Claims</u></b>	<b><u>Cost</u></b>
<b>2008/2009</b>	<b>16</b>	<b>\$34,093</b>
<b>2009/2010</b>	<b>5</b>	<b>\$35,584</b>
<b>2010/2011</b>	<b>9</b>	<b>\$48,710</b>

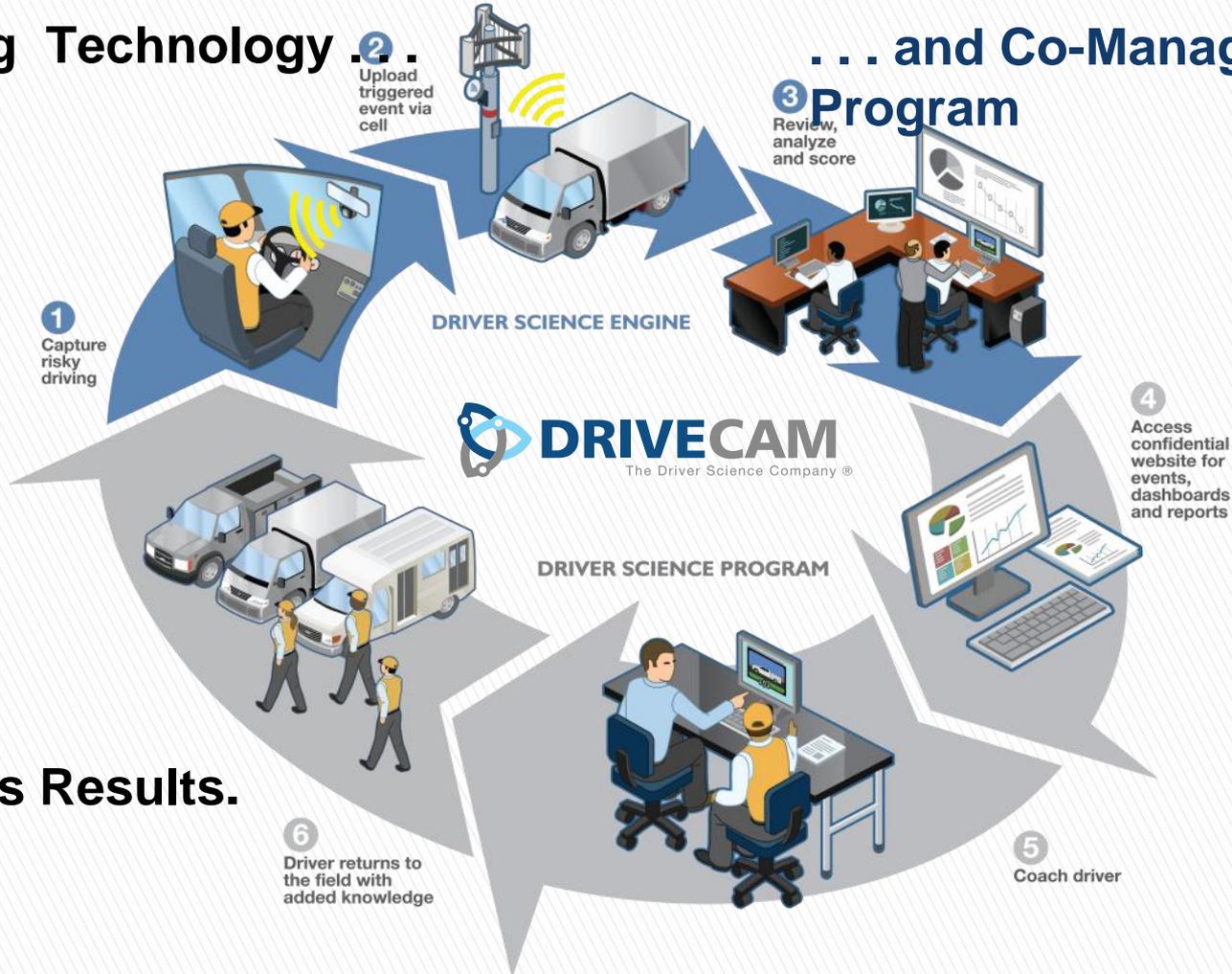
# Analyze



Providing Technology

2 Upload triggered event via cell

... and Co-Managing a Program



Produces Results.

## How DriveCam Works

# Analyze



## **1. Monitor Driving; Provide Real-Time Feedback**

Video event recorder continuously monitors and captures driving behavior, and provides real-time driver feedback.

## **2. Upload Video and Data**

Exception-based video and data are uploaded via a secure cellular connection to DriveCam's Data Center – and are immediately available to you.

## **3. Analyze, Score and Prioritize**

Proprietary data analytics, combined with expert video review, highlight the causes of poor driving and prioritize actions needed to reduce fleet risk and operating costs.

## **4. Access Driver Management Portal**

Configurable alerts direct clients to online tools, including dashboards for company-wide visibility and accountability, and hotspot mapping for analysis of poor driving.

## **5. Coach Driver**

Coaching takes the process from risk identification to improvement. Supervisors and drivers meet to view the video. The goal is to identify the risk and correct that action.

## **6. Safer Driver Returns to the Road**

Continuous monitoring verifies that lessons have been applied and protects drivers, resulting in fewer preventable collisions.



## DriveCam Safety Foundation – Collision Avoidance

Modifying Driver Behavior Before the Major Incident



The Solid Waste Department wants to operate here so we don't end up at the top.



# Implement



	Department	Solid Waste
	Procedure	Implement DriveCam

I. Purpose:	Create safer drivers by eliminating risky behavior.
II. Scope:	Solid waste department
III. Definition:	<p>Behavior- other observed bad driving habits like no seat belt, distracted driver and cell phone usage.</p> <p>Coaching- viewing the video with the driver to change risky behaviors.</p> <p>DriveCam-an audio and video recording device that is trigger by force, speed or manually.</p> <p>Driver- vehicle operator.</p> <p>ER-event recorders.</p> <p>Events-12 second DriveCam video clips.</p> <p>Incidents-event clips.</p> <p>Points- each risky event is assigned a point total ranging from 0 to 10.</p> <p>Resolved- when a clip has been coached.</p> <p>Risky- bad or deliberate driving habits.</p> <p>Tampering-trying to cover up, unhook, restrict camera view or removing from windshield.</p> <p>Top Performers-drivers with no risky or scored event in a 6/12 month time frame.</p> <p>Save Changes-lets DriveCam know event status and saves coaching comments.</p>
IV. Procedure:	





## Coaching

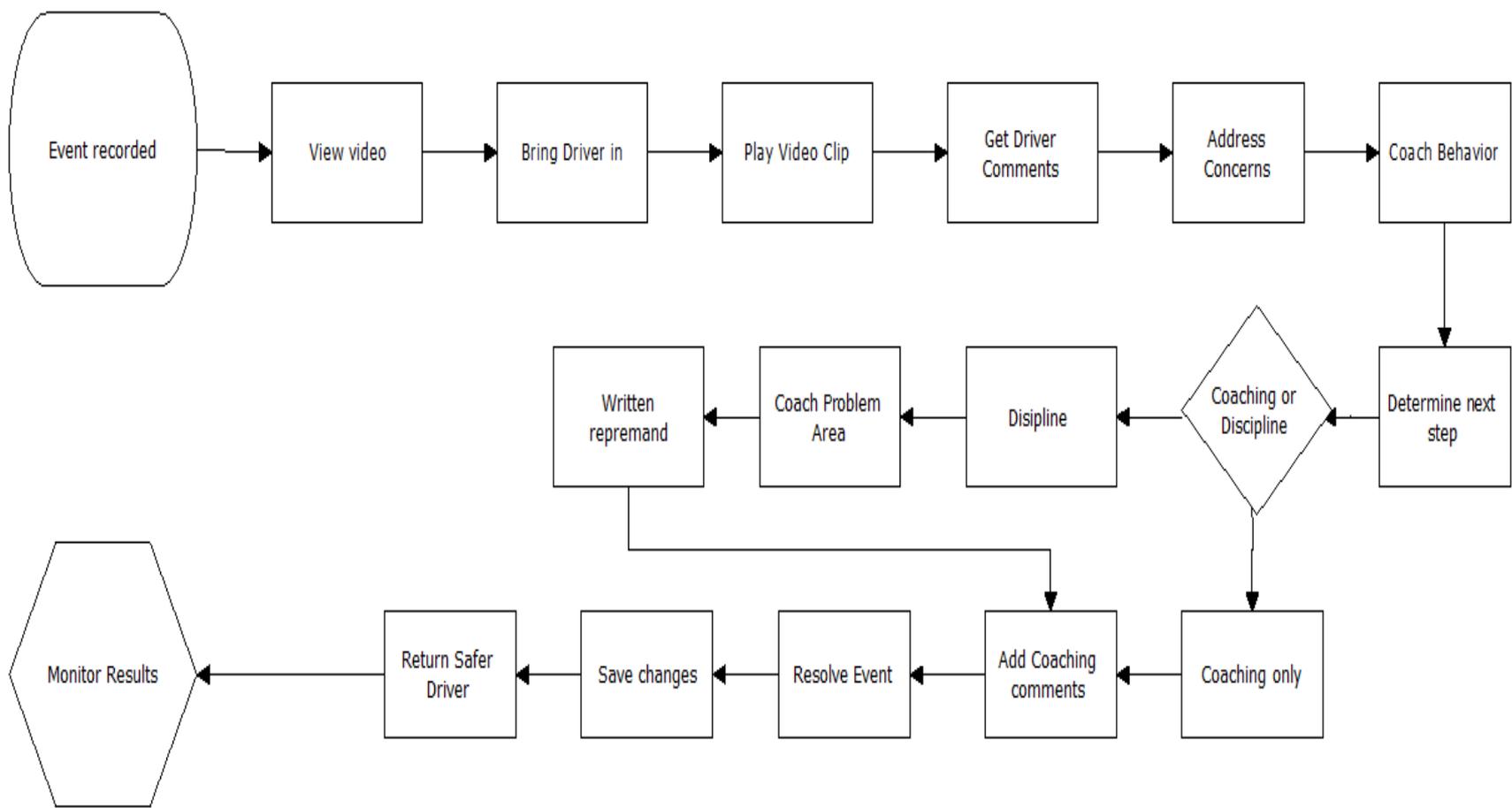
- Bring the driver in as soon as possible.
- Play the event clip for the driver.
- Allow the driver to view the comments.
- Ask the driver for their comments.
- Explain the issues and concerns.
- Address the behavior that needs to be corrected.
- Be positive when coaching.
- Determine next step, further training or disciplinary action?
- Note comments to the event and solutions with the driver present.
- Change course of action to “Resolved”.
- Then select “Save Changes”.

### **Coaching Best Practices**

- 5 to 10 minutes per session.
- Focus on what needs to change.
- Respect the driver privacy.
- When an employee has multiple coaching incidents, show group events.
- Stick to the facts.
- Listen to the drivers viewpoint.
- Acknowledge positive behaviors.



## Process Map





## Discipline

Coaching is the backbone of the DriveCam Program and its success in changing driver behavior. However there are certain times when drivers don't respond to coaching, training or other forms of feedback. Despite numerous efforts by management, they simply refuse to change. This is where a disciplinary process needs to be in place.



## Disciplinary Procedures

Any DriveCam incident or series of incidents that identify risky behaviors or serious infractions may result in disciplinary action. In arriving at a decision, both the nature and severity of the incident and prior record of the employee will be taken into consideration. If the conduct or behavior is determined to be unsafe, disciplinary action up to, and including, termination may occur based on the nature of the behavior and circumstances leading to the incident.

The Solid Waste Department professional drivers are expected to meet acceptable standards of safe conduct and performance. Maintaining these standards promotes a safe place to work and ensures the safety of all employees and the general public.

Formal documented discipline will be taken in the following instances;

- Driver accumulates more than 24 points during any consecutive three-month period;
- Driver accumulates more than 42 points during any six-month period
- Driver has more than 3 of the same repeated behaviors during any consecutive three-month period.
- Driver has more than 6 of the same repeated behaviors during any consecutive six-month period .

Driver may be terminated in the following instances;

- Driver accumulates more than 42 points during any consecutive three-month period;
- Driver accumulates more than 78 points during any consecutive six-month period.
- Driver has 6 or more repeated behaviors during any three-month period.

Based on the type of risky behavior, circumstances and severity, timely and appropriate discipline will be taken for all Near Collision-Avoidable(NCA) events and Collision-Avoidable events.

All disciplinary action will take into account the cumulative actions of the specified incident and the historical behavior of the driver over the previous 12 months . Nothing precludes termination of drivers with point totals less than 78 should, in management's opinion, the employee be unresponsive to coaching and progressive discipline and not willing to modify his/her unsafe driving behavior.



## Disciplinary Procedures

Any events where the driver or rider is observed violating a pre-established policy of either The City of Tyler or The Solid Waste Department will receive a written reprimand.

Cell phone use while operating a City vehicle. (City)

Smoking in a City Vehicle. (City)

Tampering with DriveCam ER. (Solid Waste)



## Recognition

As a balance to a disciplinary plan , its also important to have a program in place that recognizes and rewards drivers who excel in the program.



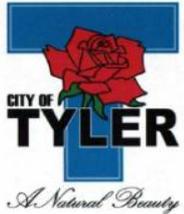
## Top Performers

Top performers are those drivers with no risky or scored events for a period of six and twelve months. These drivers are recognized by the Department in a special safety meeting where breakfast is provided. They are given a certificate and shirt acknowledging their accomplishments. Those drivers who have completed a year under these guidelines also receive a City of Tyler Solid Waste watch (that was previously only given to 20 year employees) and a \$50 gift card. These meetings are set up to give recognition to the driver not only by our department but City wide. Currently we have held two such meetings and representatives from DriveCam have attended. The shirts issued are the only approved shirt to be worn other than the standard uniform. Pictures of awarded drivers are also displayed on our electronic visual management boards as further recognition. As a part of this recognition these drivers, having met additional requirements, are temporarily released from their team responsibilities and allowed to leave when their routes are completed.



## Recognizing Safe Drivers





## City of Tyler Solid Waste Awards Program for DriveCam

Wednesday, February 6, 2013  
7:00 a.m.



“DriveCam helped identify our riskiest drivers, who when properly coached, made a significant reduction in risky driving behavior and a 72 percent decrease in costs associated with collisions. ”

- Sara McCracken, Risk Management Department , City of Tyler, TX

### Program

Breakfast 6:45—7:15a.m.

- ◊ Invocation by Victor Franklin
- ◊ Remarks by Russ Jackson
- ◊ Remarks by Susan Guthrie
- ◊ Remarks by Sara McCracken
- ◊ Remarks by Rush Akins with DriveCam
- ◊ Presentations of Awards
- ◊ Closing Remarks

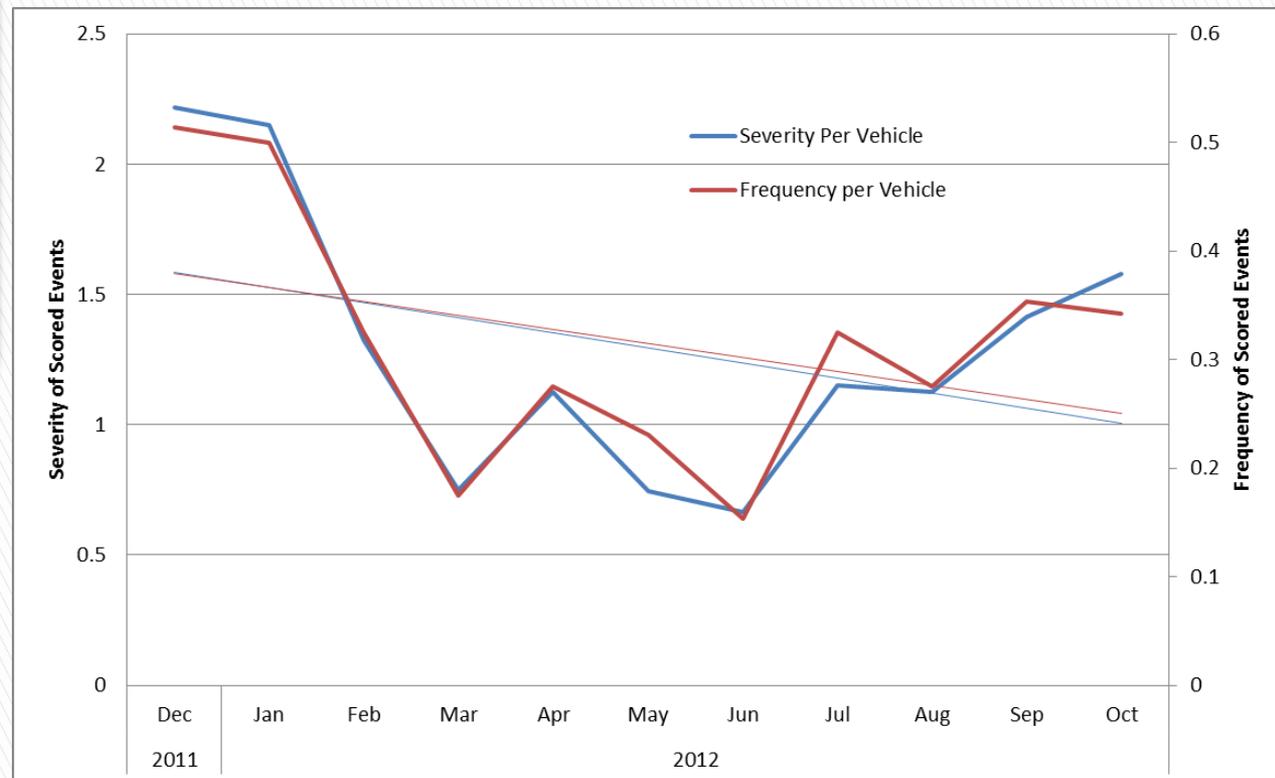




4% improvement in frequency and 3% improvement in severity from Jan-May vs. Jun-Oct

Increase in Sept-Oct due to new cameras and increase in Traffic Violations (Posted Speed Violations)

## Historic Performance

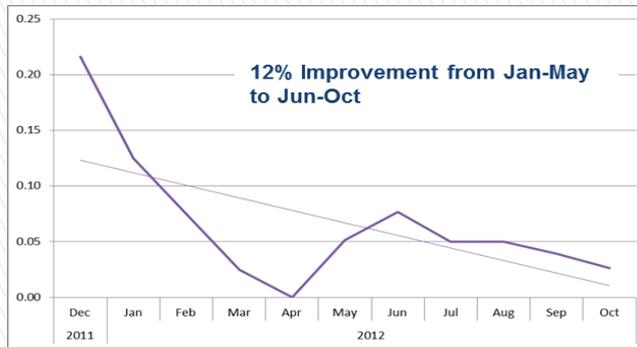




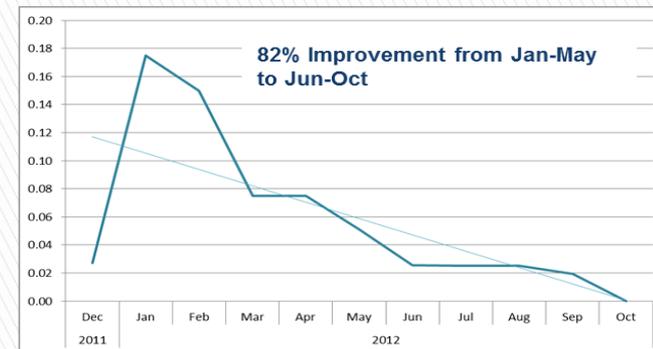
## Most Improved Behaviors

From Insights Newsletter #2, the Top 5 Risky Driving Behaviors from over 16 million events among waste collection vehicles in the country. The City of Tyler Solid Waste Department has shown an measurable improvement in the top 2 areas: Following Too Close - 12%  
Not Looking Far Ahead - 82 %

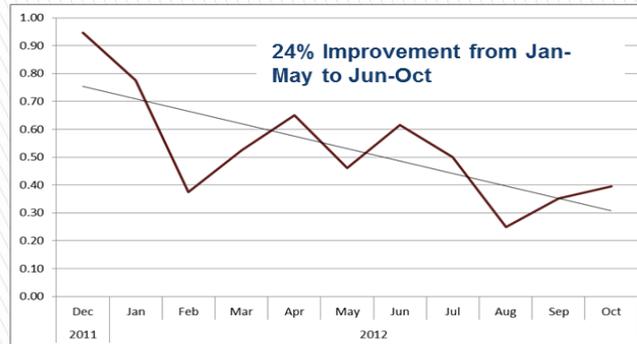
**Following Too Close**



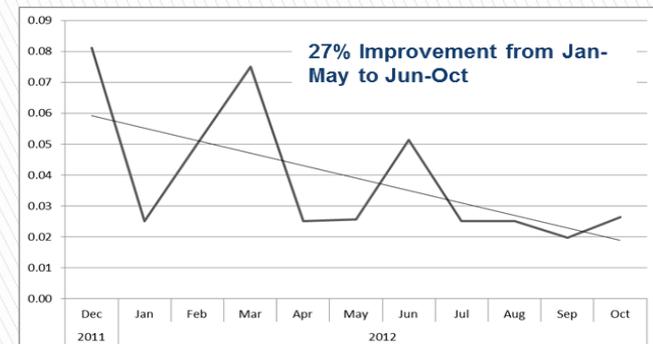
**Not Looking Far Ahead**



**Driver Unbelted Roadway**

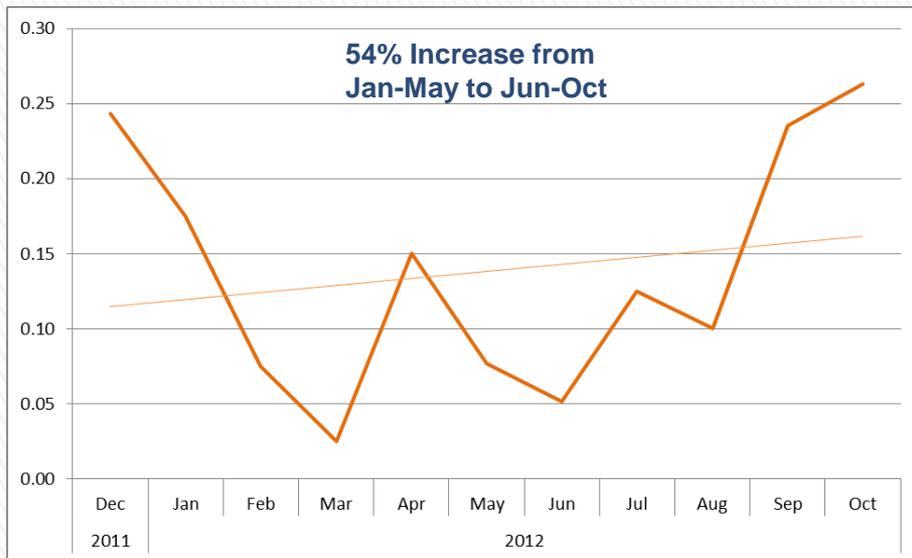


**Cell Phone Handheld**

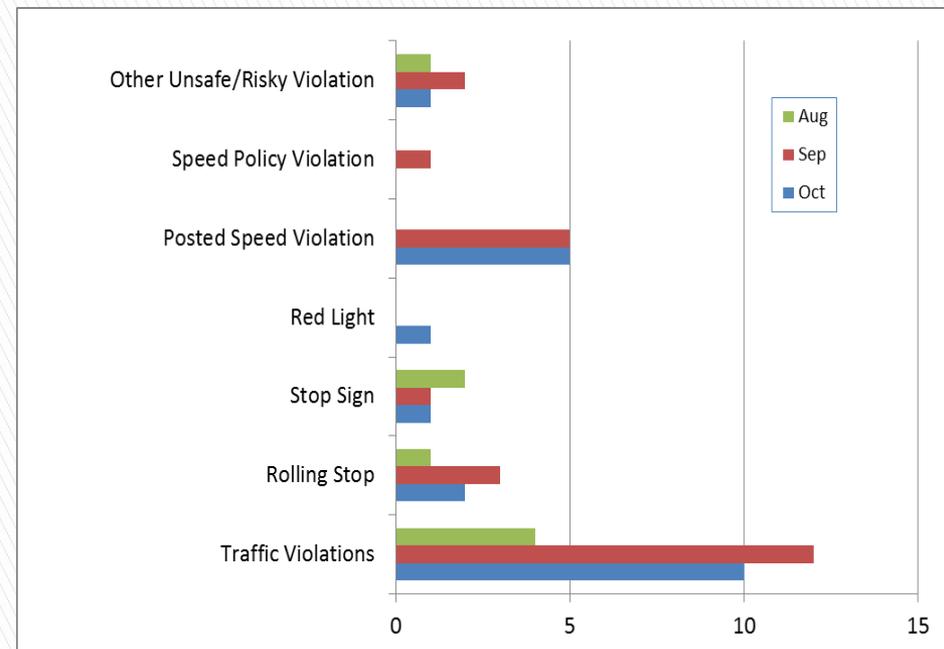




## Traffic Violations

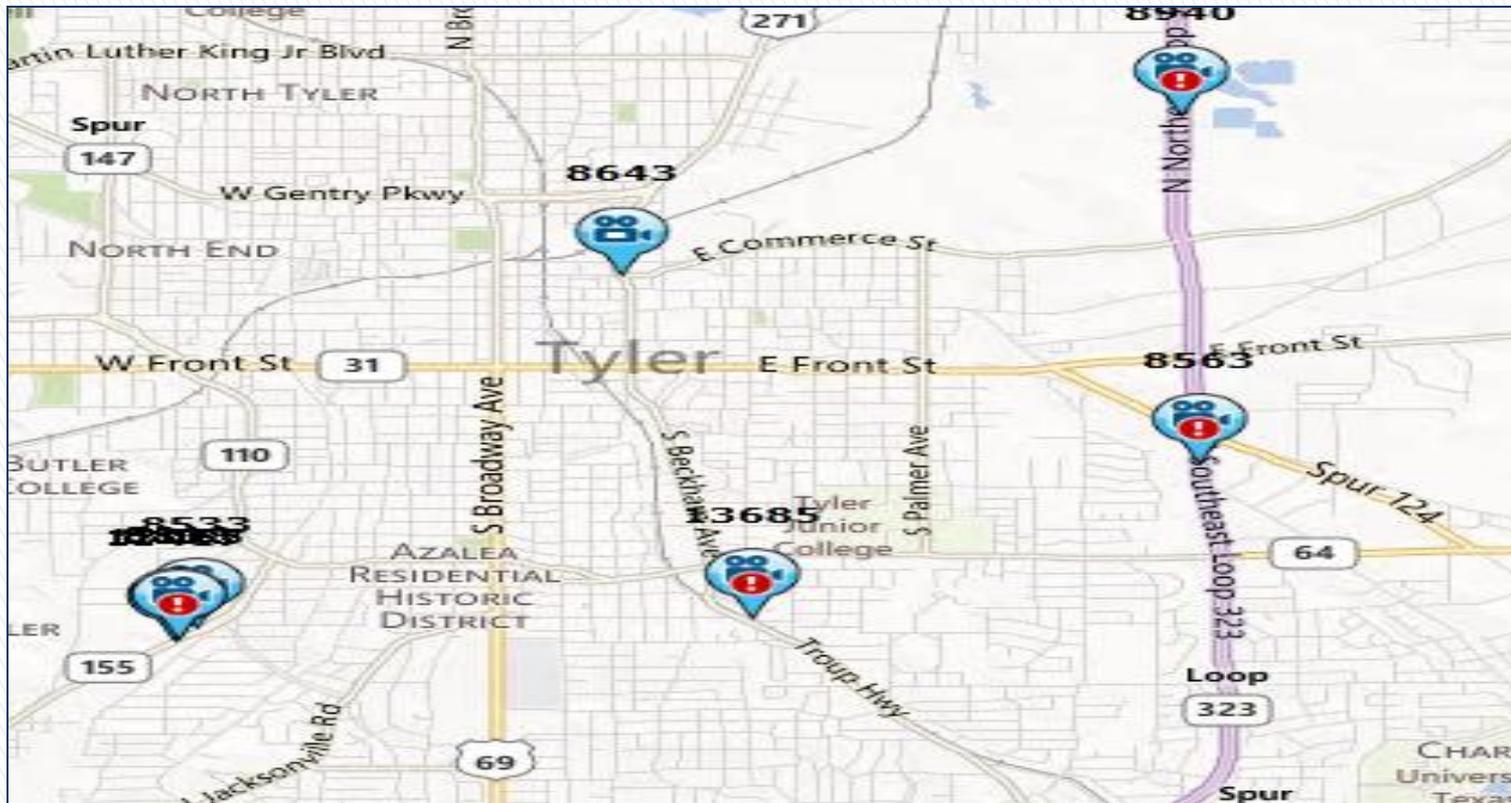


DC3P VER's installed in September will capture an event based on speed. This new feature has uncovered additional risk that was otherwise unknown before. Increased coachable Traffic Violations are the result.





## SPEED VIOLATIONS



Mapping allows visibility into where each Speed Violation took place. Coaching to improve speed awareness in these locations will help trend down violations over time.



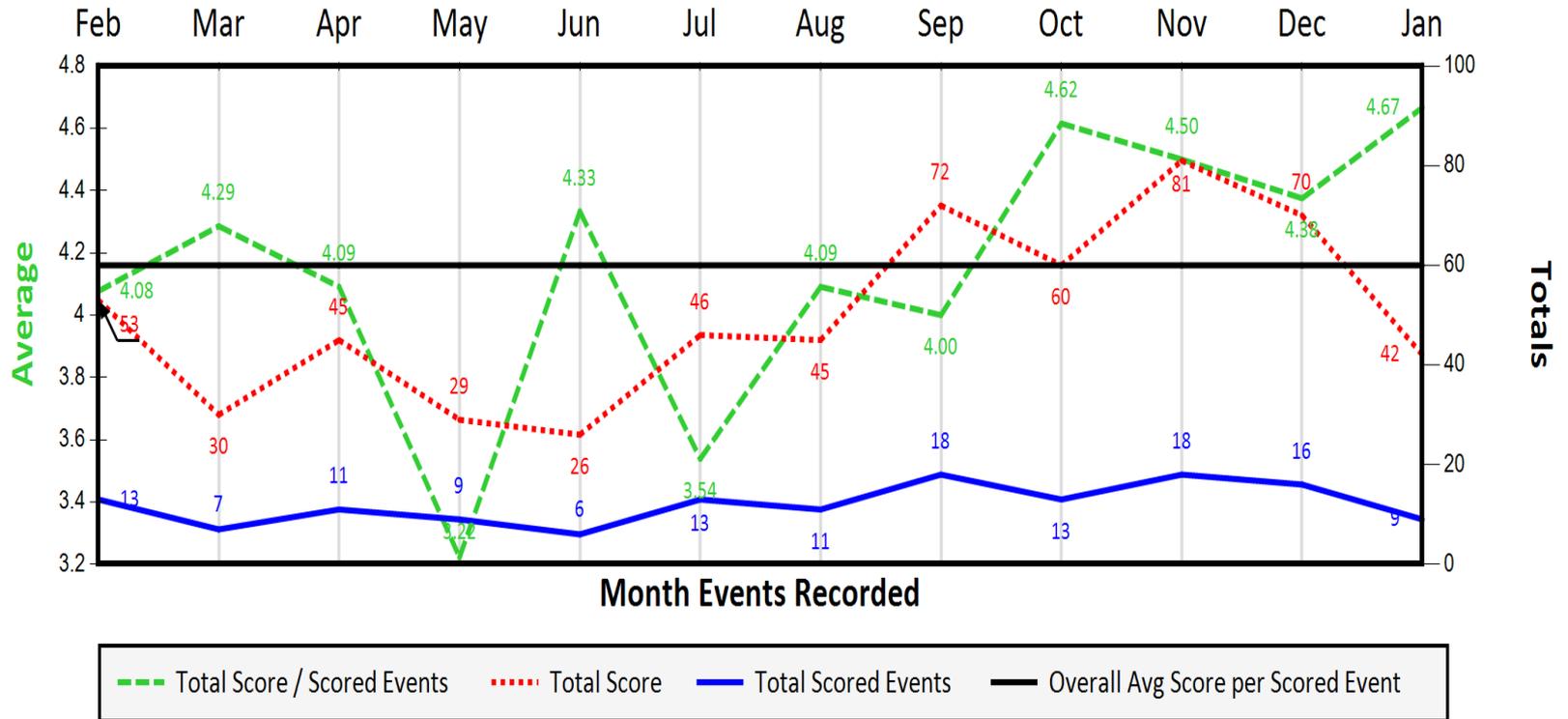
## January 2013

<u>Event Totals</u>	<u>This Month</u>	<u>Last Month</u>	<u>Change</u>
Total Events:	227	273	 -17%
Scored Events:	9	16	 -44%
Total Coachable Events:	13	24	 -46%
Coachable Events with Score = 0:	4	8	 -50%
Average Score (per active ER):	1.1	1.8	 -39%
Events Coached:	10	32	 -69%
Events Overdue for Coaching:	0	0	0%
Vehicles Overdue for Download:	0 (0% of fleet)	1 (2% of fleet)	-100%
Top Behavior Exhibited:	Posted Speed Violation	Posed Speed Violation	



## Event Summary

Scored Events and Total Score Summary (Last 12 Months)





## The City of Tyler Solid Waste Department

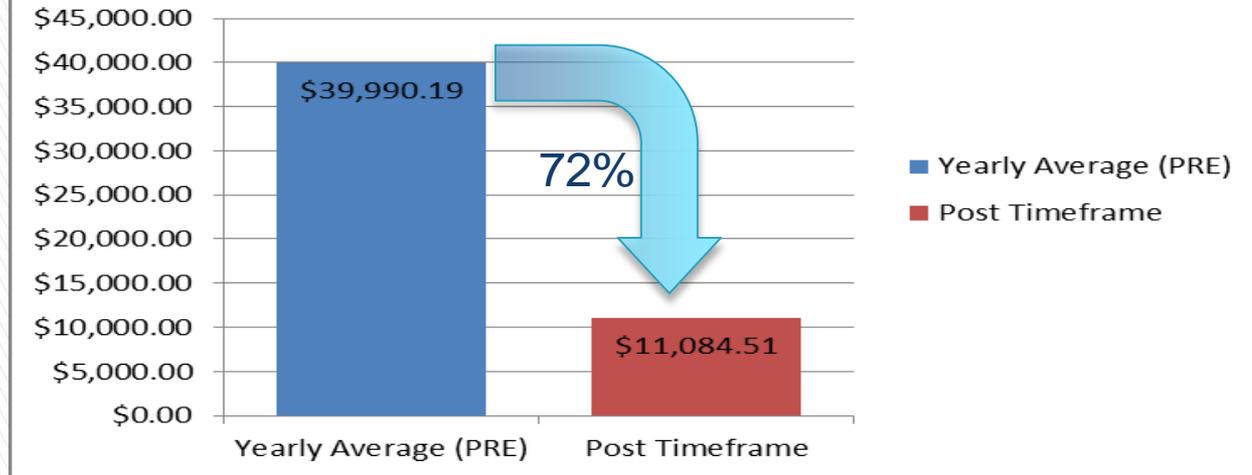
### Property and Causality Claims Cost

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<b>2011/2012</b>	<b>9</b>	 <b>\$13,859</b>

1 Full year under DriveCam, \$25,604 under 3 year average



## Solid Waste Annual Claims Cost Pre/Post



\*Annual Claims Spending for Tyler Pre, 1-Year Post DriveCam installation.

\*Yearly average represents data from 2006-2011.

**12 months following the Deployment in Solid Waste, the vehicles with DriveCam experienced a 72% reduction in auto liability incurred dollars paid.**



## Lessons Learned.

Employee buy in takes time.

Used properly results are evident and measurable.

Greatly improved driver awareness.

Better system that requires less time to monitor,  
even with the coaching sessions.

Beneficial tool for driver communication and verification of route problems.

Coaching strategies need to be creative and flexible.

Various reports that allow for quick insights to route and driver.

Fleet tracking has improved documentation of routing and route issues.

Ability to eliminate questions on damages and assign ER incidents to proper operators.