



Chris Copeland

Business Development Mgr
SE Region US



The Worlds Largest Thermal Imaging Company

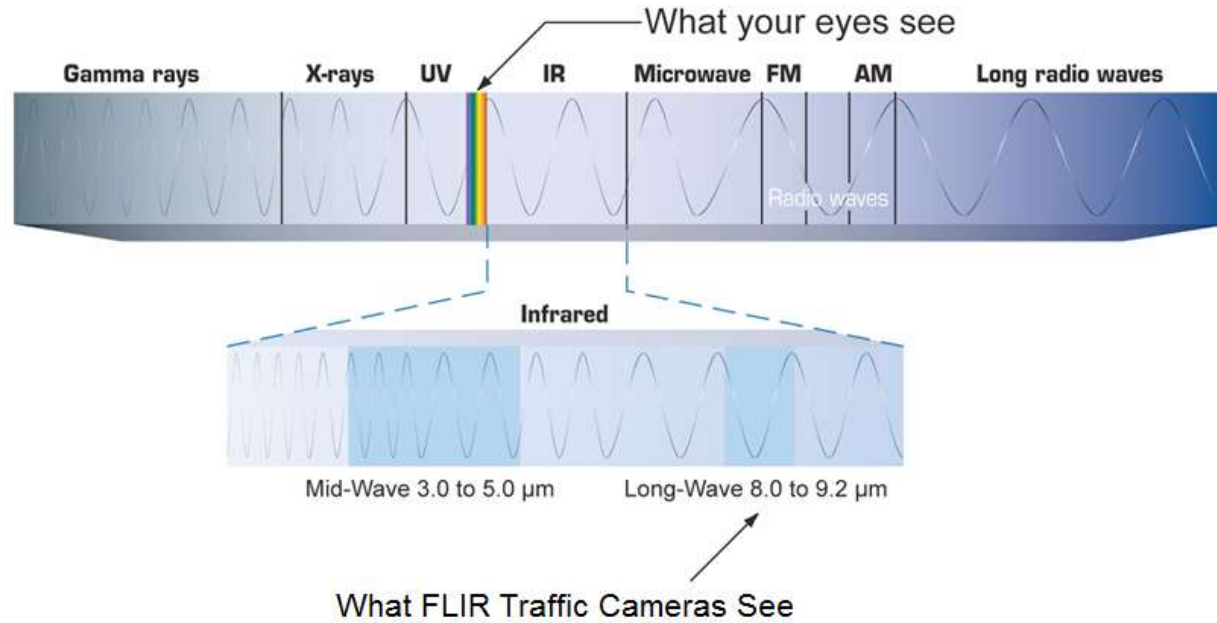
Commercial Systems
Government Systems



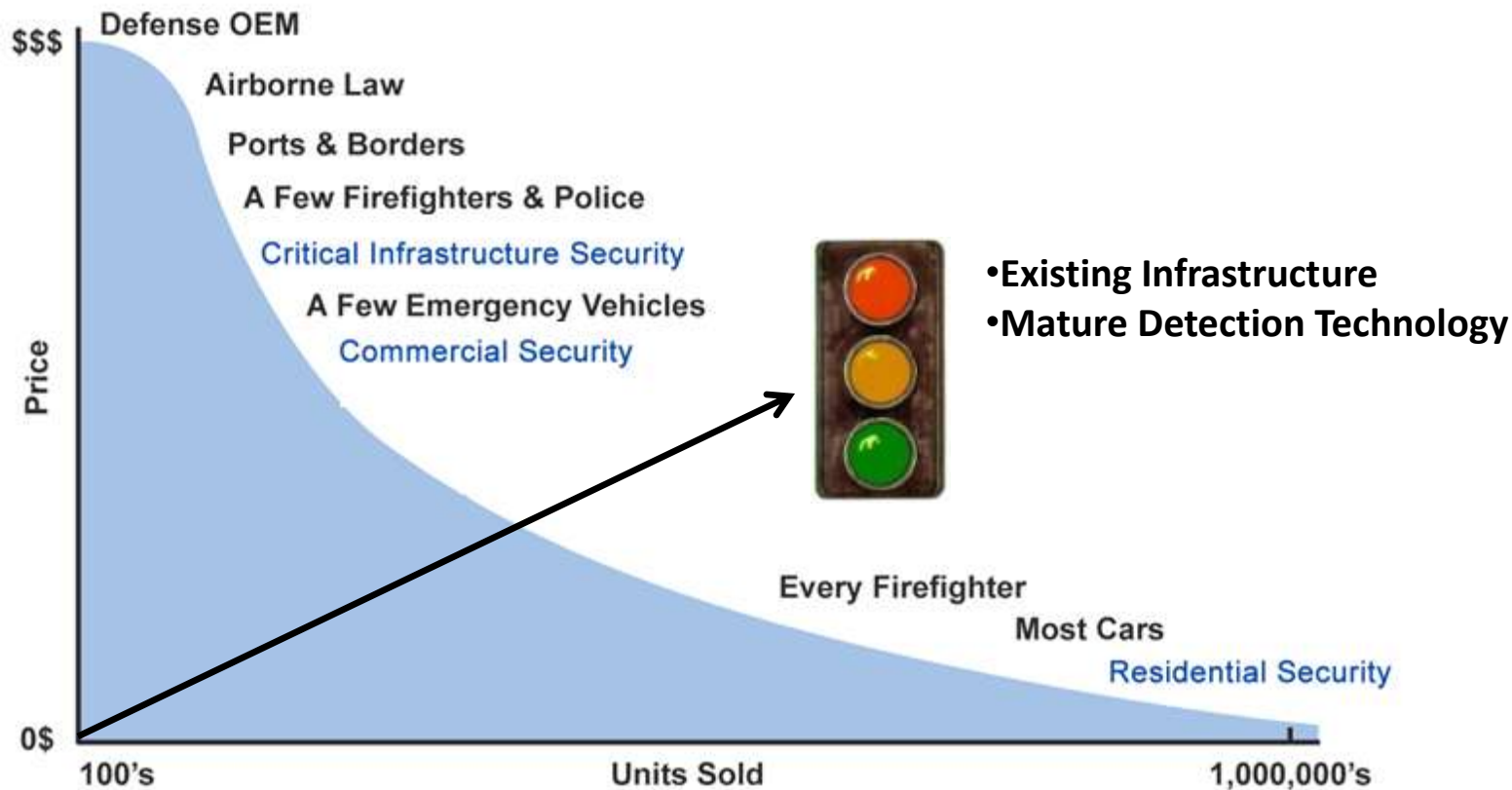
3,000+ employees at 4 major sites around the world
2010 Revenue \$1.4 Billion

What Makes FLIR Thermal Imaging Unique?

FLIR Thermal Imaging is **NOT Infra Red (IR)** Illumination



FLIR for Traffic-Why now?



Video Challenges for Traffic Detection



Horizon

- Sunrise
- Sunset
- Backlight



Lighting

- Low Illumination
- Glare/Shadows
- Head Lights
- Wet Roads



Contrast

- Low Vehicle/Road Contrast
- Vehicle lost in shadow



Weather

- Fog
- Rain
- Snow

Sunrise / Sunset / Backlight



Limited Illumination / Darkness



Heavy Snow



Morning Fog



Traficon



Iteris





Texas Department of Transportation

Providing safe, effective, and efficient movement of people and goods.

Autoscope



What We Do Maximize Detection

While Maintaining Privacy

-  Don't See Through Glass
-  See in Limited Illumination & Total Darkness
-  Unaffected by Sunrise / Sunset / Backlight
-  Enhance Contrast
-  Outperform CCD Technology in all Challenging Conditions: Light Fog, Rain & Snow

FLIR What's the Difference?



Visible CCTV



Thermal

Sunset / Backlight Issues Eliminated



Visible CCTV



Thermal

Blinded by the Lights, Not with Thermal



Visible CCTV



Thermal



Simple Installation



No Low Contrast Zones
No Fog Zones
Simple Retrofit





Green Design Criteria

- Minimize Scene Illumination, lower implementation cost



Simplify Programming

- Lower Installation Labor
- Reduce Punch List & Return Trip Costs



Reduce Unplanned Maintenance

- Minimize Service Calls During Inclement Weather



No Optical Lens to Clean

- Lowers Operating & Maintenance Costs

Other ITS Applications



- Counts
- Incident Detection
- Animal Detection
- Ped and Bicycle Detection
- Tunnels (Emergency & Traffic Flow)
- Construction Zones
- Transit Pre-Emption

Traffic Optimized Thermal



Standard Security Settings



Enhanced for Traffic DDE



Nothing in the Ground

No RF Issues

No Exposed External Hardware

No New Software to Learn

No Optical Lenses to Clean

MTBF 12.4 Years

Snohomish
County 





City of San Antonio



