

Risk Based Surveillance

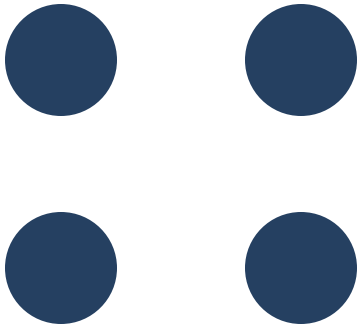
Getting more for less

Risk Based Surveillance Workshop - Lima, Peru - 19 & 20 March 2018

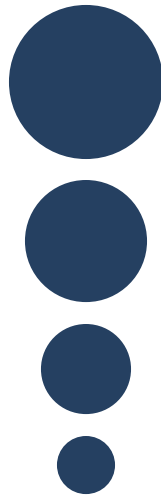
Prescriptive Surveillance

3 most common methods of resource allocation:

One size fits all



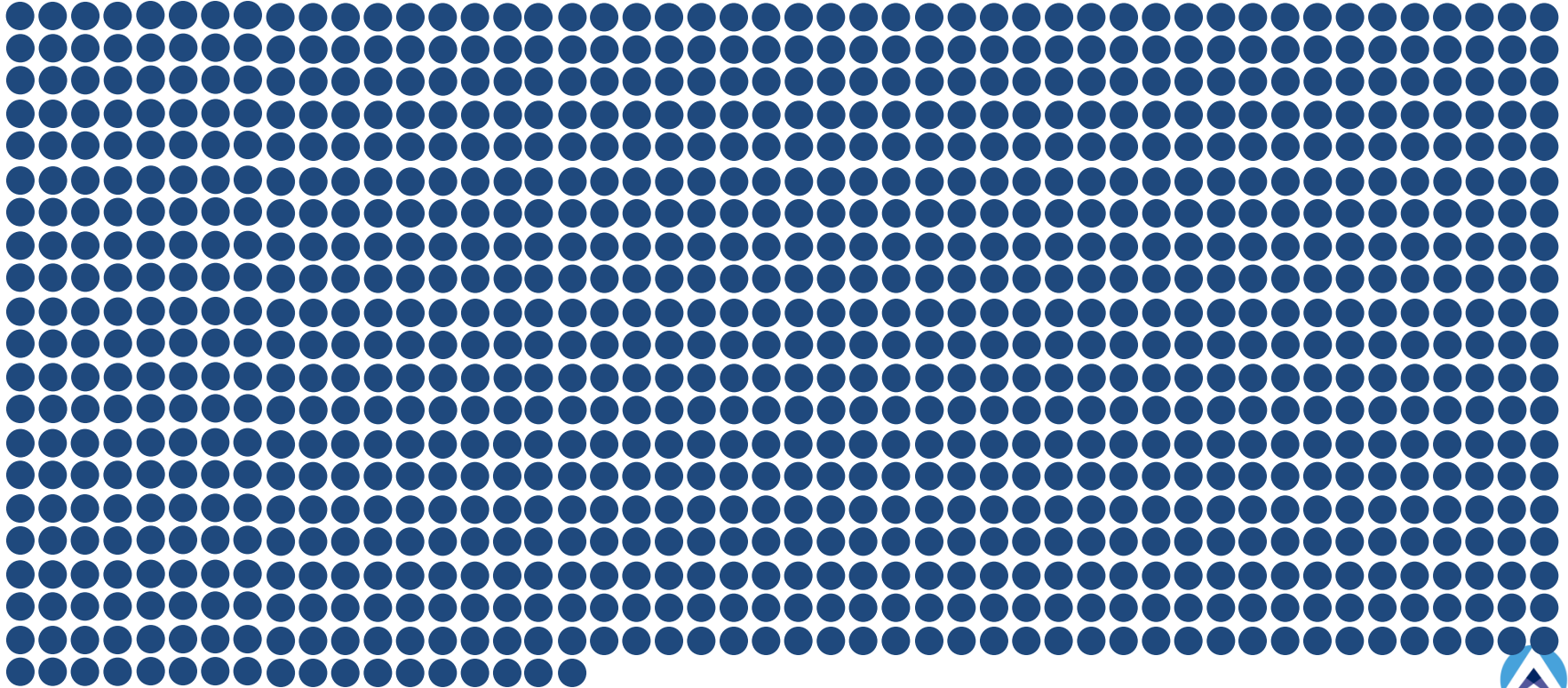
Based on size



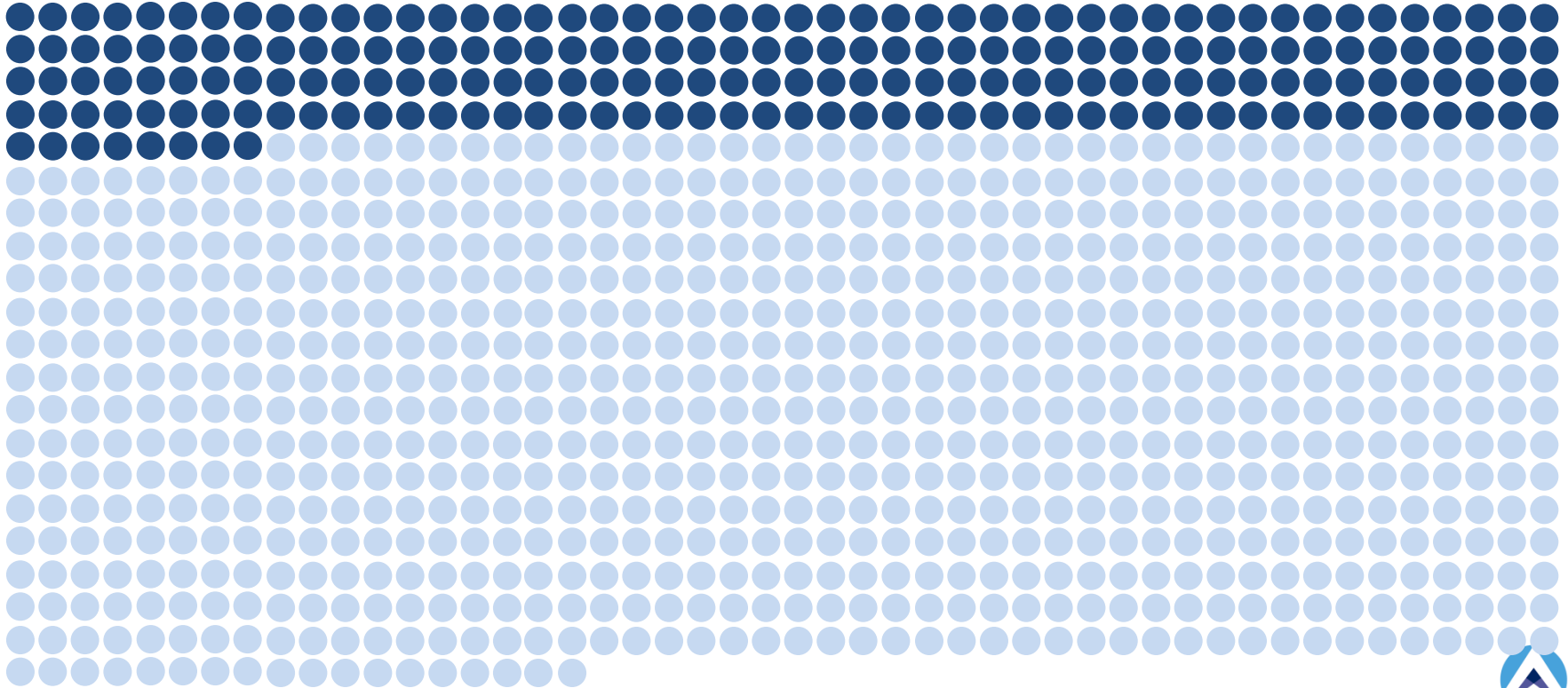
Completely random



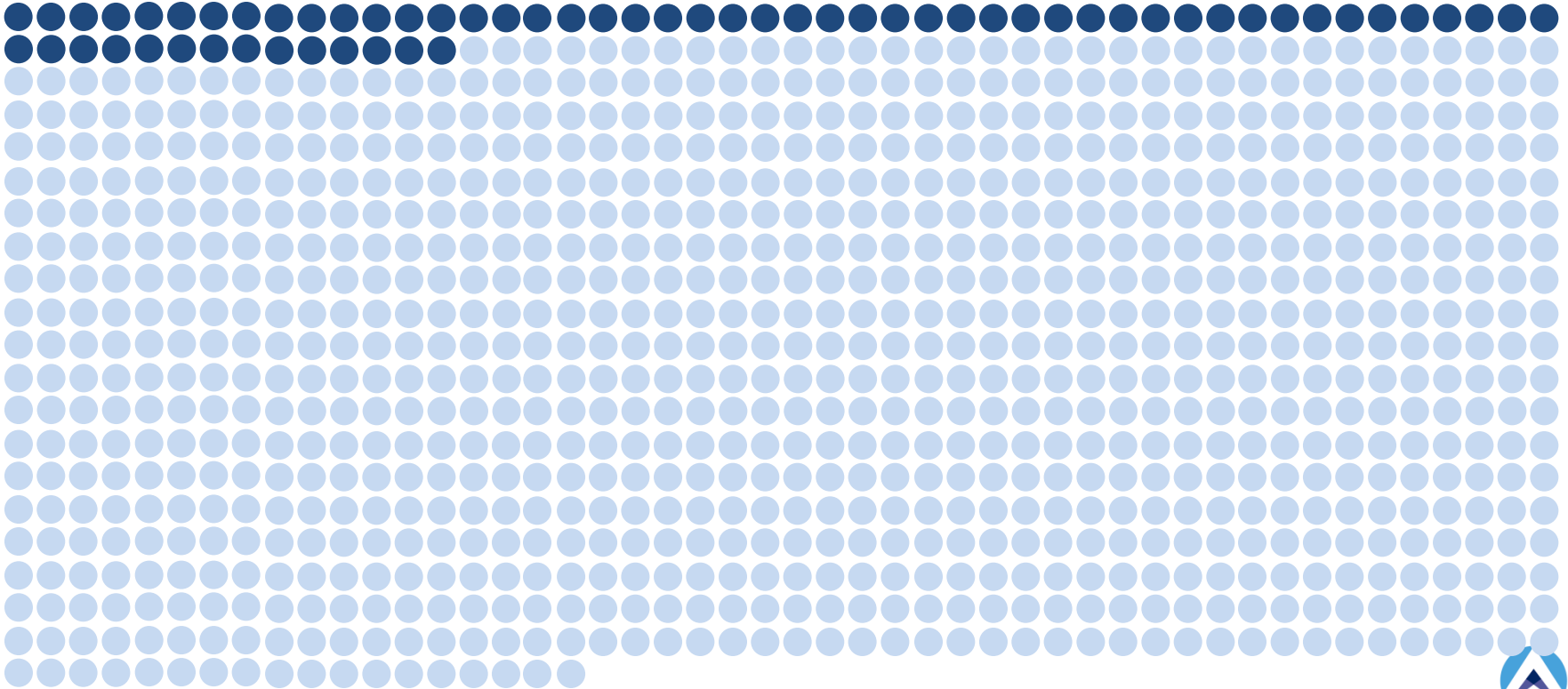
944 IDISR Ramp inspections 2016



Only **201** Unsatisfactory



Barely 64 properly closed



4 hours
2 inspectors
8 man-hours

742 Satisfactory inspections
8 man-hours/inspection

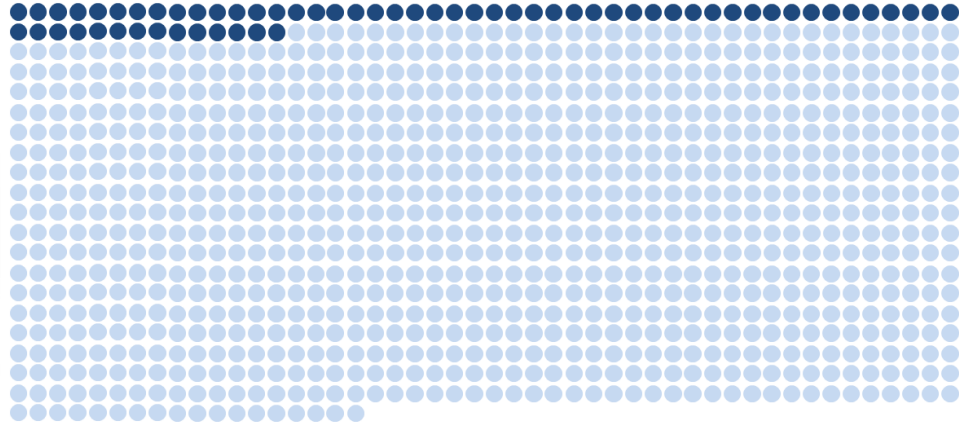
5933 man-hours



News › World › Americas

US forced to import bullets from Israel as troops use 250,000 for every rebel killed

250,000 : 1 Ratio



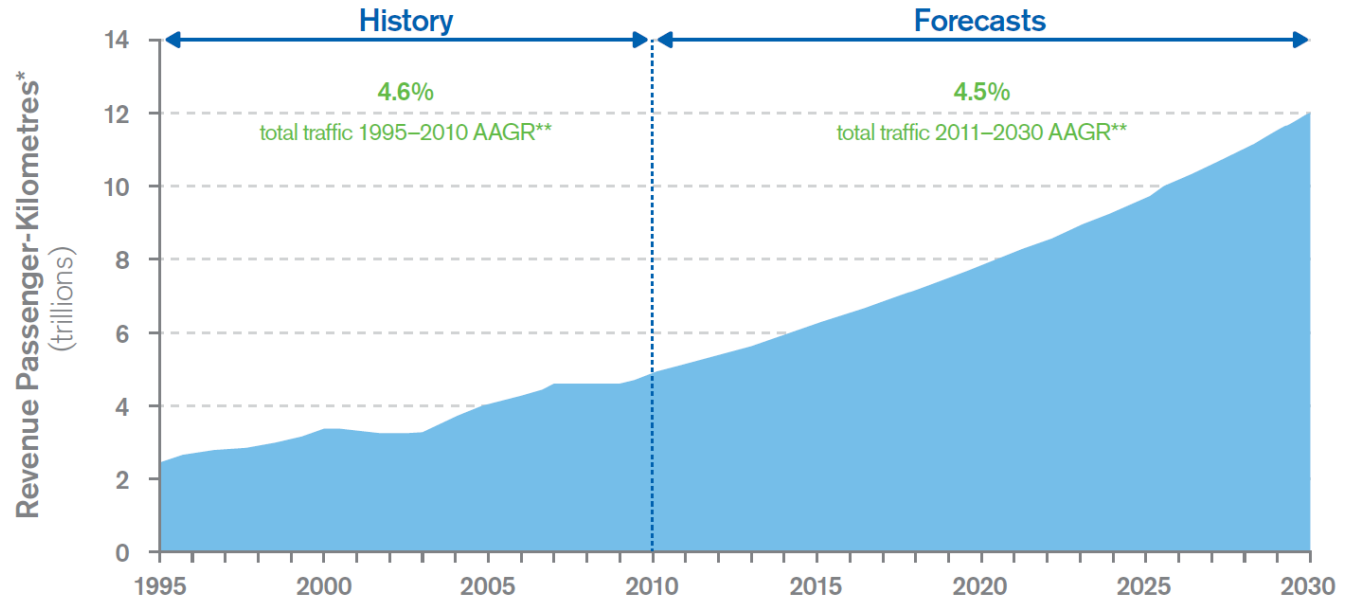
What about traffic growth?

Air transport is
a growth market

60%

growth over
the last ten years

More than double
since 9/11



By [Rod Powers](#)

Updated October 19, 2016

According to figures released by the Department of Defense, the average number of rounds expended in Vietnam to kill one enemy soldier with the M-16 was 50,000. The average number of rounds expended by U.S.

military snipers to kill one enemy soldier was 1.3 rounds. That's a cost difference of \$23,000 per kill for the average soldier, vs. \$0.17 per kill for the military sniper.



1.3 : 1 Ratio

So, how we turn this



250,000 : 1 Ratio

into this?



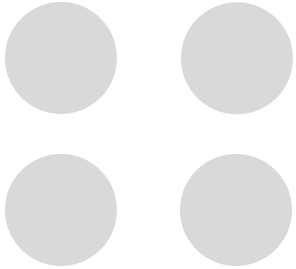
1.3 : 1 Ratio



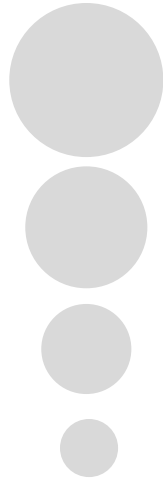
**Copying
those who
know**

Risk Based Surveillance

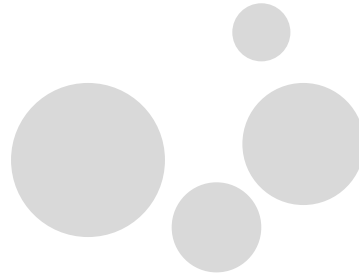
One size fits all



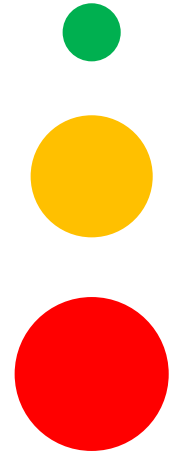
Based on size



Completely random



Risk Based



Risk Based Surveillance

Resource allocation based on individual
service provider risk profile = **EFFICIENCY**



Must be performed by teams

Must be based on consensus

Must complement not replace

Must be applied gradually

Must be revised periodically



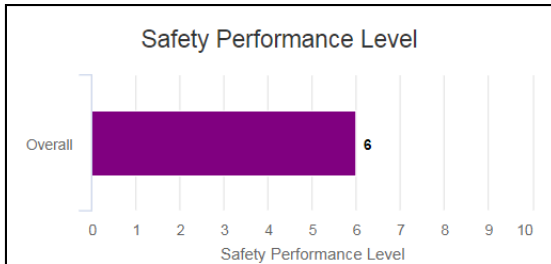
1. Risk Based Surveillance Planning
To whom and how much?
2. Risk Based Surveillance Execution
What and why?
3. Findings follow-up and control
Now what?

1. Risk Based Surveillance Planning

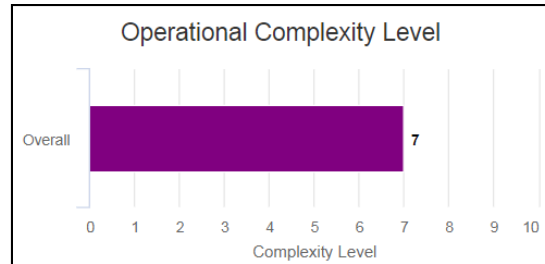
To whom and how much?



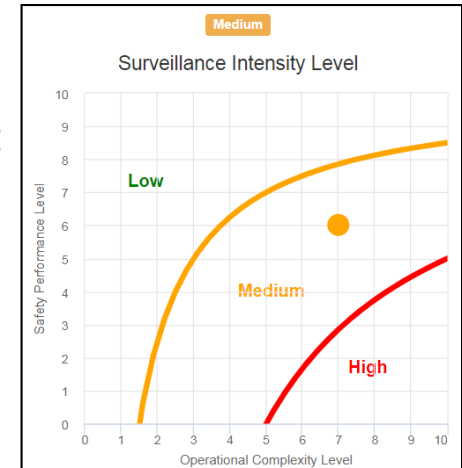
Risk Based Surveillance



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Activity Type	Related Population	Minimum Activities	Periodicity
Route Inspection - Cabin	Stations	8	2 months
Route Inspection - Flight Deck	Stations	8	2 months
Ramp Inspections	Aircraft	13	1 month
Station Inspections	Stations	8	2 months
Check Pilot Inspections	Check Pilots	3	4 months
Base inspection	-	1	18 months

2. Risk Based Surveillance Execution

What and why?



It's all about DATA

Risk Based Prioritization

90% preparation

10% execution

3. Findings follow-up and control

Now what?

States to implement suitable means to ensure:

- ✓ Easy and fast consultation of findings status
- ✓ Timely resolution of open findings
- ✓ Timely warnings are received when deadlines are about to expire
- ✓ Timely warnings are received when deadlines expire
- ✓ Easy and comprehensive data analysis for trend identification

Surveillance metrics

How well are we doing

Set of 3 complementary metrics as part of State SSP:

Surveillance Compliance Rate **(1.0)**

Finding per Inspection Ratio **(1.0)**

Closed findings rate **(1.0)**

States to set annually SMART targets



“The highest type of efficiency is that which can utilize existing material to the best advantage”.

(Jawaharlal Nehru)