

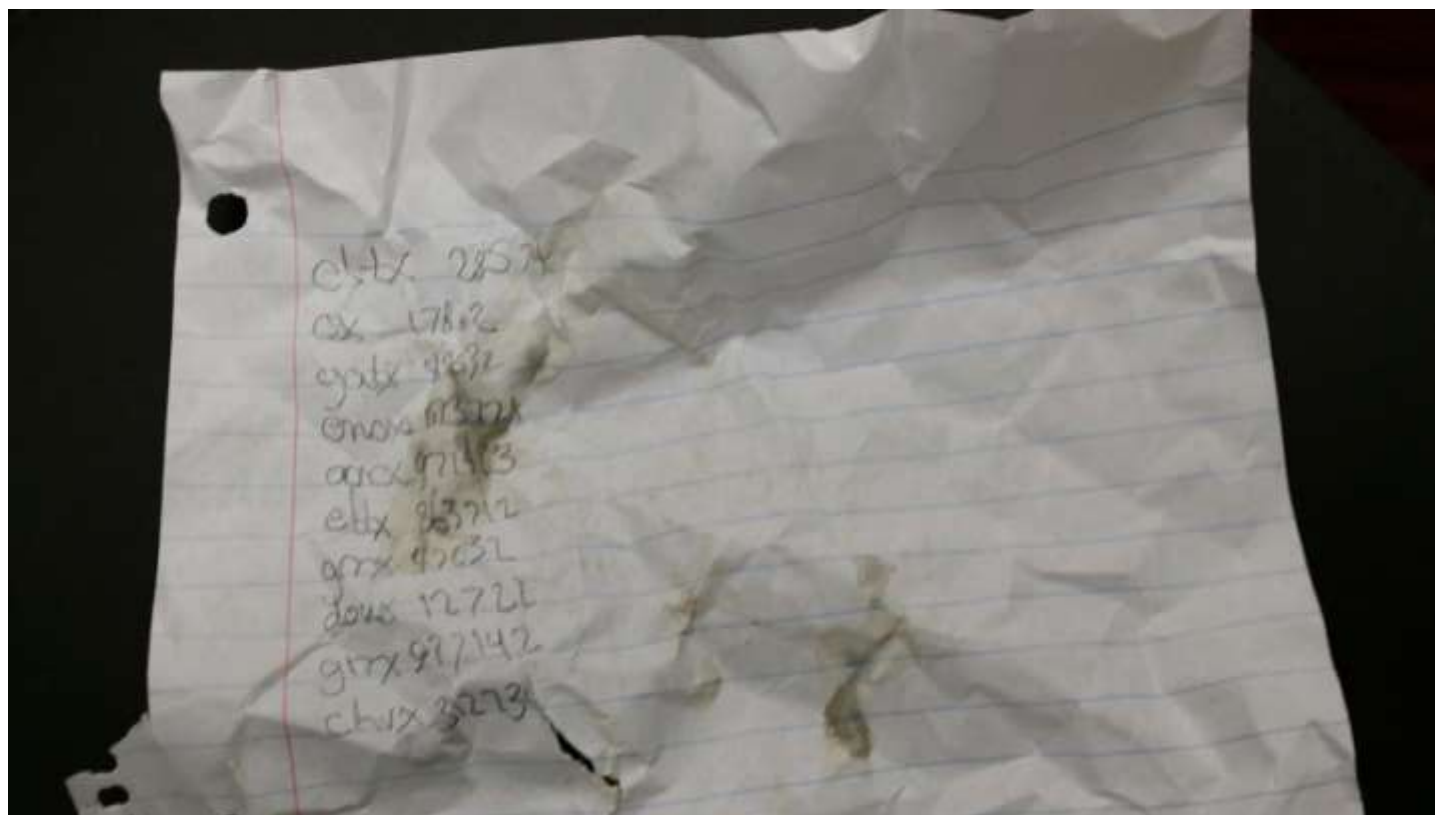
April 30, 2014

North East Association
of Rail Shippers



Ten Tech Topics with RFID

Start with quality documentation



Process it effectively





Problems

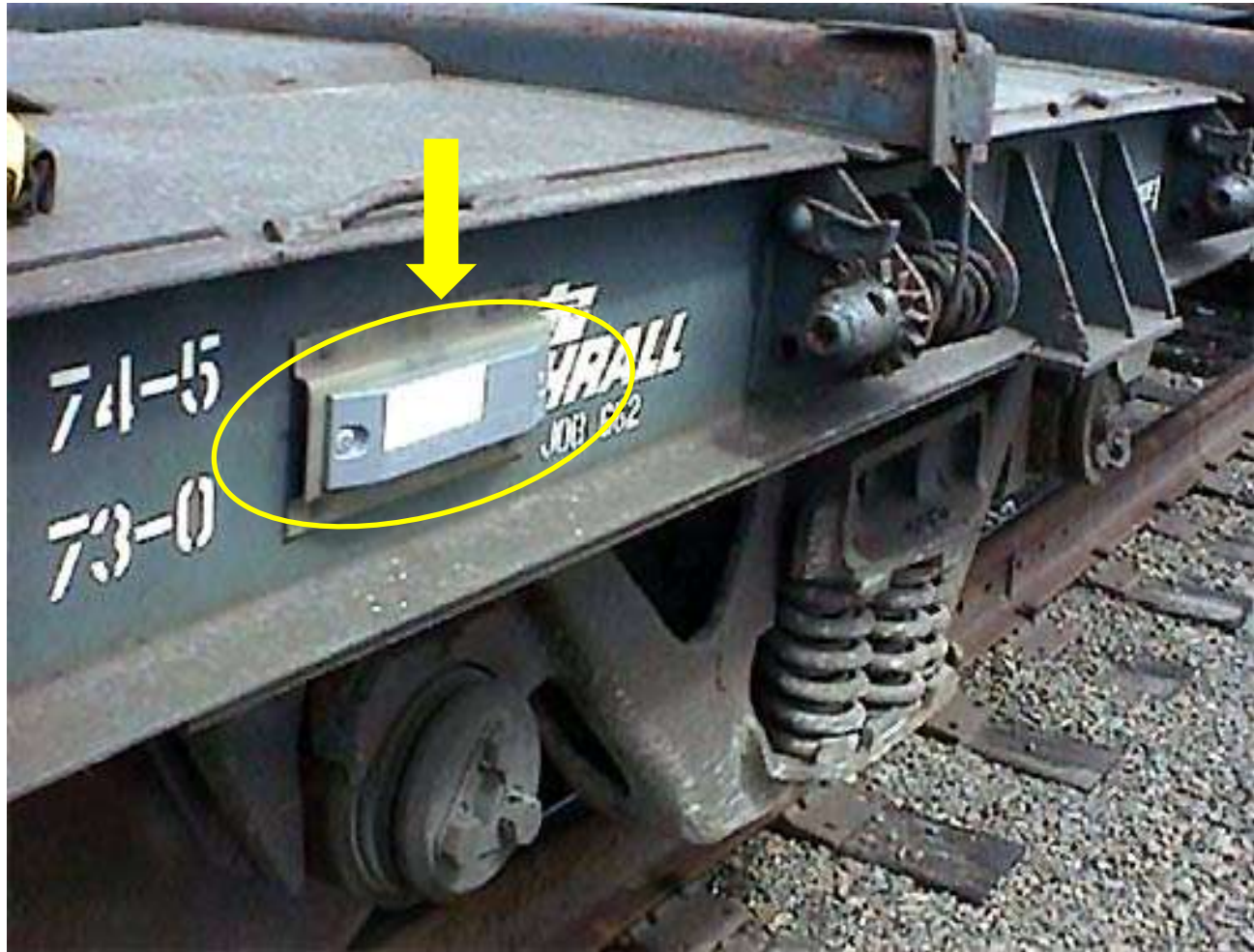




Solutions!



Railcar RFID tag



Typical Stationary Reader



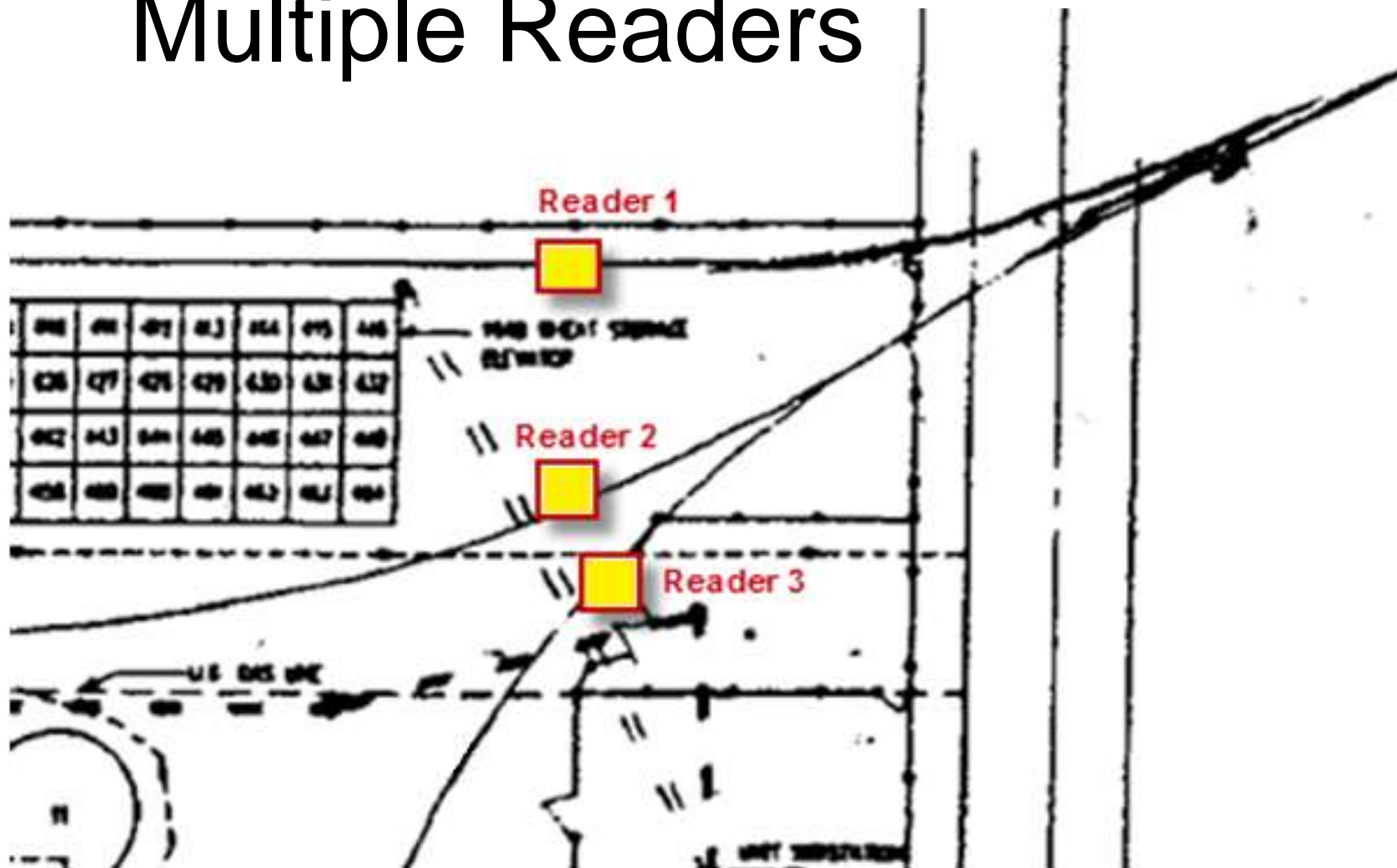
Left side antenna

Right side antenna

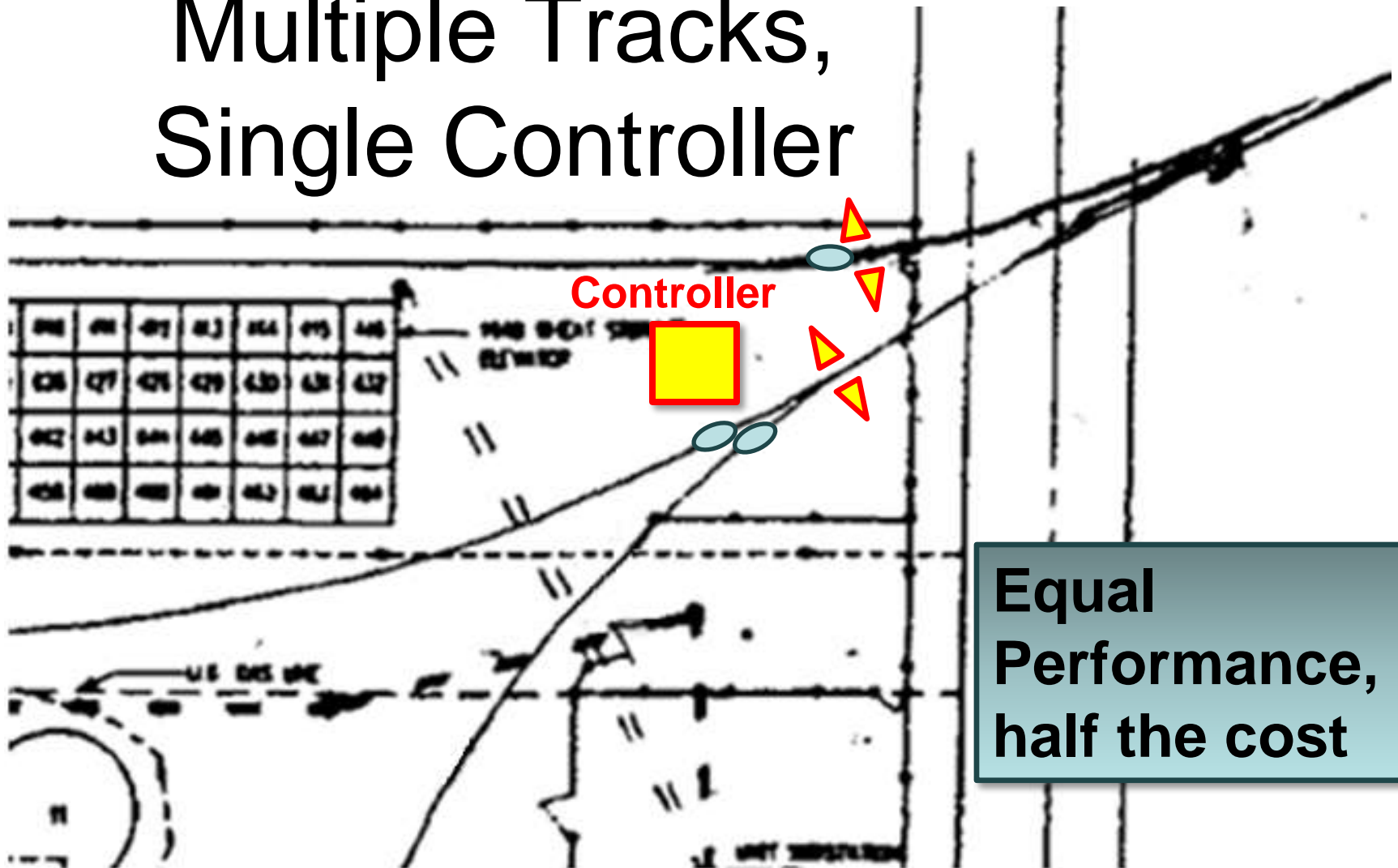
Wheel detector for
axle count and
direction of
movement

Processing and
communications
equipment

Multiple Tracks, Multiple Readers




New Design, Multiple Tracks, Single Controller



Portable AEI Readers



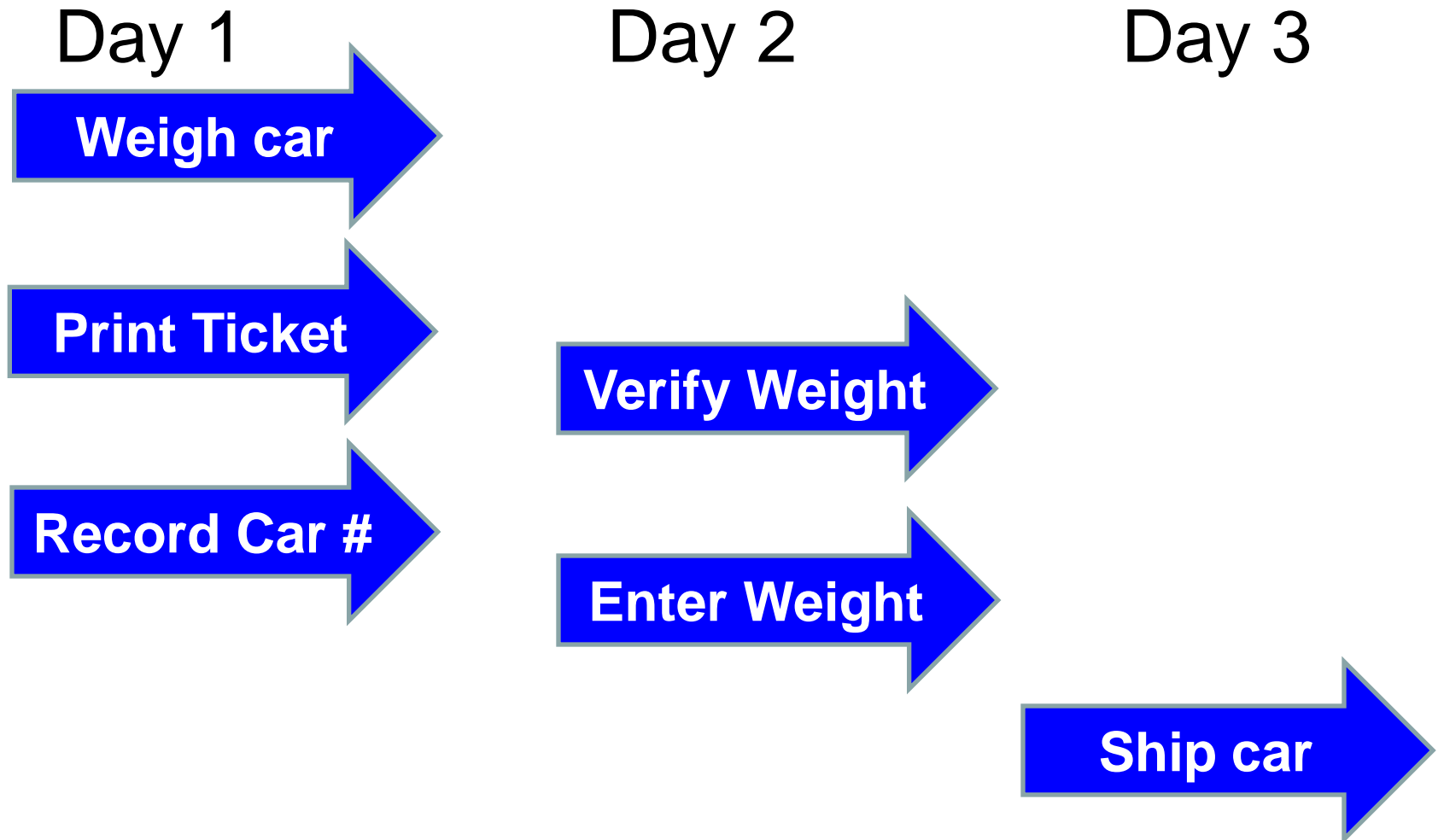
 EI SYSTEMS		Track Walk	
Site	EIS		
Yard	YARD1		
Left	South	Right	
TRACKA	↑	TRACKB	
Spot	1	North	Spot
<input type="button" value="View"/>	<input type="button" value="<->"/>	<input type="button" value="View"/>	
Car#	AMCX009259		
Status	Empty ▼		

Sample Output File

Seq	Date-Time	Car Initial	Car Number
001	09/15/2011 13:19	UTLX	660159
002	09/15/2011 13:19	GATX	204381
003	09/15/2011 13:19	UTLX	061462
004	09/15/2011 13:19	TILX	200437
005	09/15/2011 13:19	GATX	057606
006	09/15/2011 13:20	UTLX	130237
007	09/15/2011 13:20	TILX	110235
008	09/15/2011 13:20	UTLX	130186
009	09/15/2011 13:20	GATX	072809
010	09/15/2011 13:21	TILX	110859
011	09/15/2011 13:21	NATX	050124
012	09/15/2011 13:21	DBUX	251011
013	09/15/2011 13:21	PROX	014974
014	09/15/2011 13:21	GATX	057407
015	09/15/2011 13:21	UTLX	011072
016	09/15/2011 13:21	TILX	200413
017	09/15/2011 13:22	GATX	031748
018	09/15/2011 13:22	UTLX	058612



Railcar Weighing



RFID-Equipped Rail Scale



Scoreboard Display for Scale

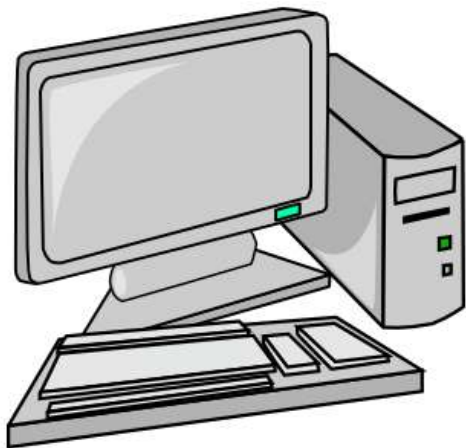


Railcar Inspections



Simple Set-up Process

Easily create any kind of checklist
(inspection forms, etc.) from your PC,

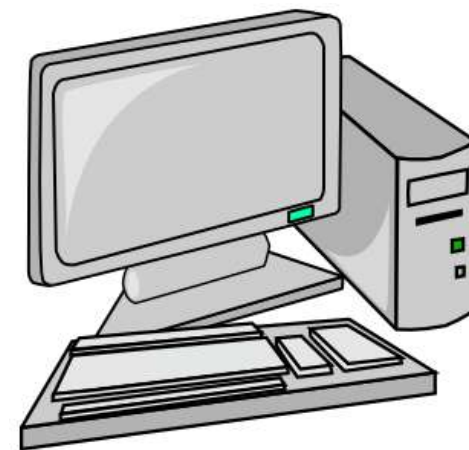


Quickly deploy them to your mobile railcar
scanners



Transfer of collected data

Field data uploads to Rail Inspect and is made available for access on any internet-connected PC



Cellular
or
Wireless
or
Docking Station

User-friendly reports

1. View cars meeting selection criteria

Report from 3/21/2009 to 9/29/2010 Car number: 123		
Inspection Date	Car Number	Inspected By
05/24/2010 14:31	TEST123123	EISADMIN
02/26/2010 14:42	EISX123456	
02/22/2010 14:09	EISX123456	
01/12/2010 17:22	TEST123456	
03/26/2009 12:34	EISX005123	
03/24/2009 08:20	EISX007123	
03/24/2009 08:20	EISX007123	
03/21/2009 23:00	EISX001234	
03/21/2009 12:51	EISX001232	

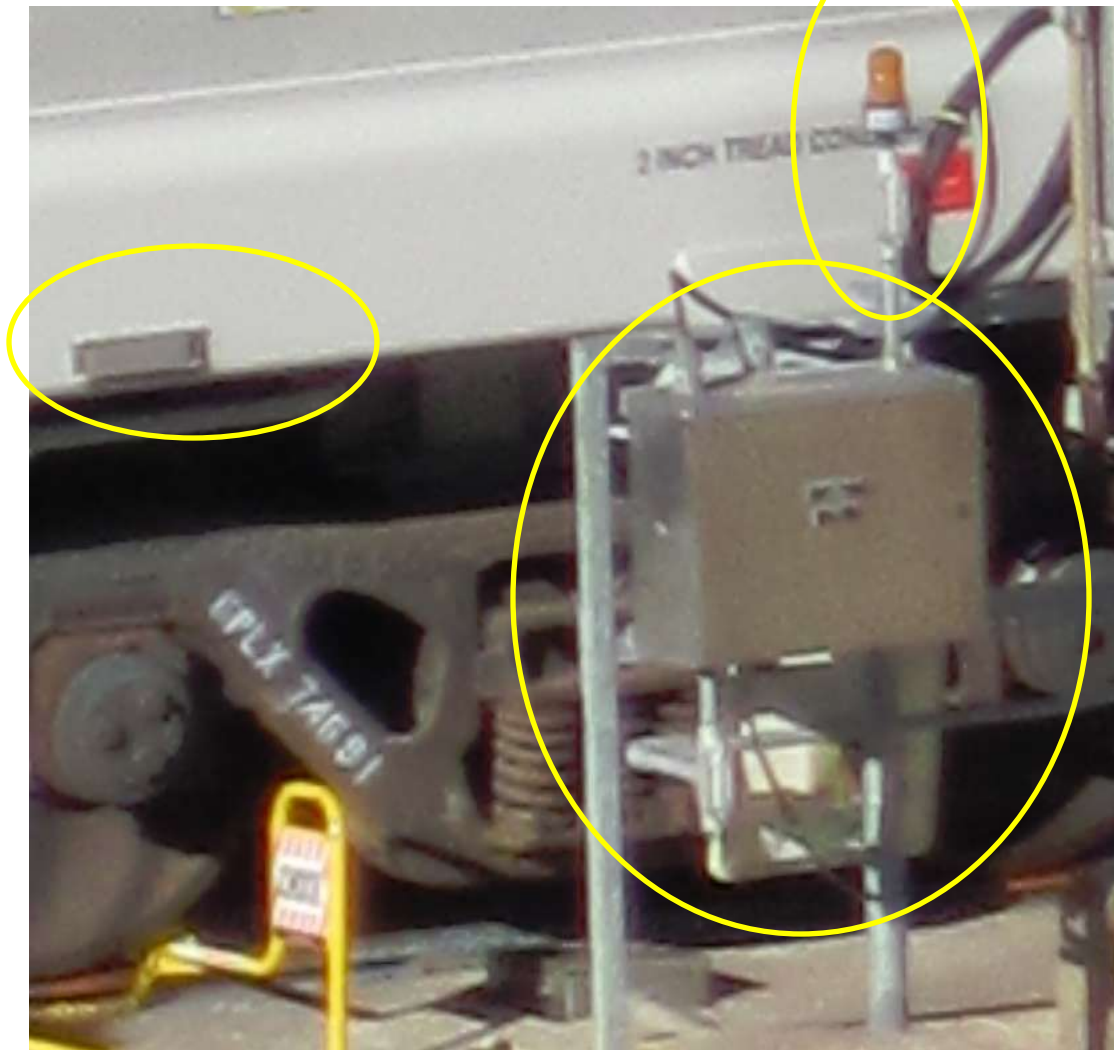
2. Drill down to view questions and responses

Car Wash Inspection Detail Report Car number: TEST123123 Inspection Comment:		
Order	Question	Answer
1	Barcode Seal Numbers	781462202
2	Cracks in Any Compartments	No[Selected] A CA CB B
3	Color of Material	Natural[Selected] Black Yellow Flake
4	Rust in Any Compartments	No[Selected] A CA CB B All 4 compartments

Barcoded Seals



Load Bay Readers



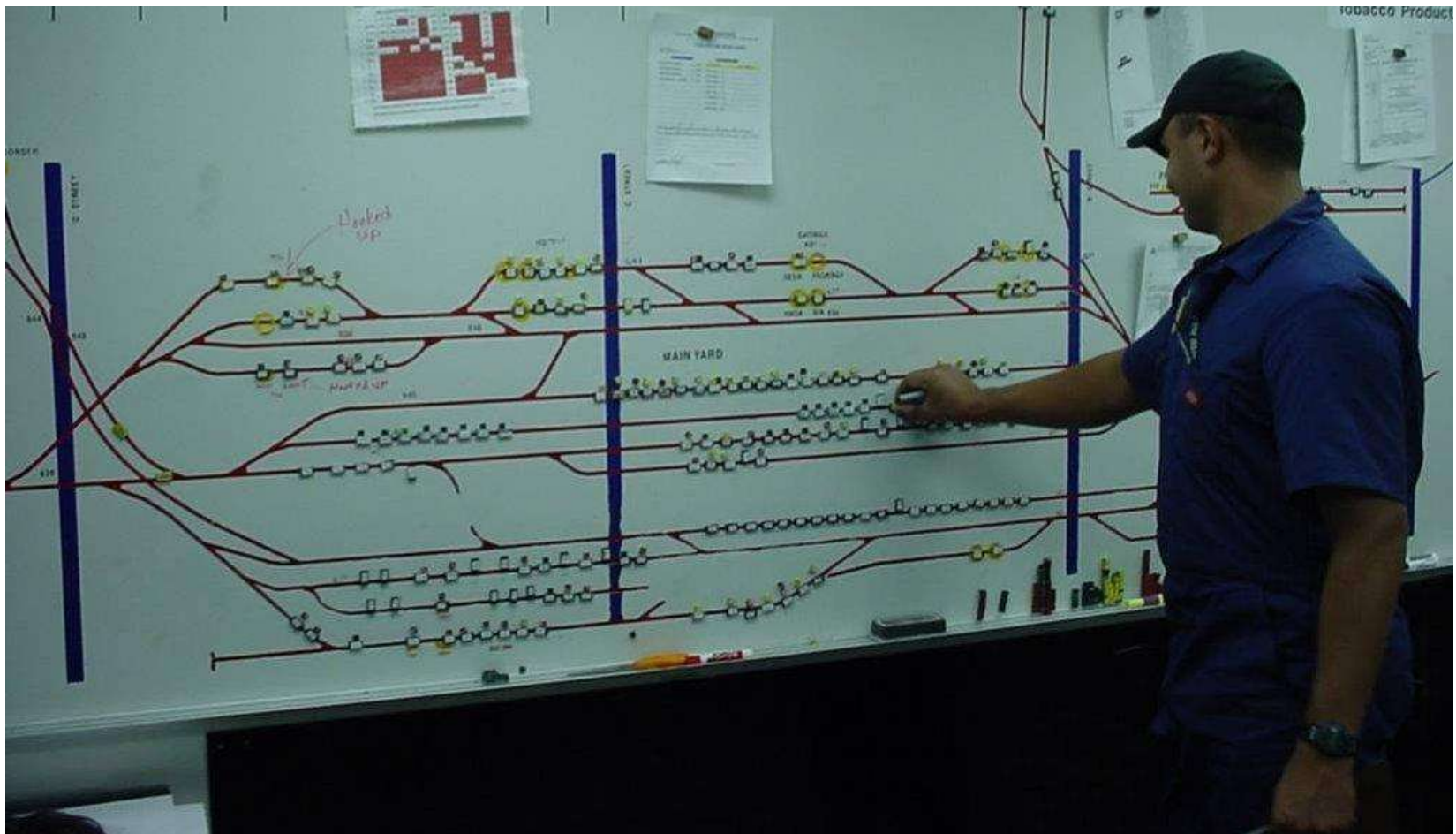
Load Bay Tags



Britain, 1944



Yard Management



Broad Integration Capability

