

APSE National Transport Operations and Vehicle Maintenance Advisory Group
8th August 2019

Using Mobile IT to revolutionise SEN Transport

Martin Owens

BigChange – International Business Improvement Director

Mark Betts (in spirit only!)

Sheffield City Council – Service Improvement Manager for Transport

Introducing BigChange...

- ❖ UK Company based in Leeds
- ❖ Established in 2012
- ❖ 20+ years experience in Mobile Workforce Management
- ❖ 25,000+ Subscribers
- ❖ Multi-Award winning technology


Best British Mobile Startup
Mobile World Congress 2017

 FUTURE FIFTY
From
TECH CITY

 50 | Technology Fast 50
2017 UK WINNER
Deloitte.



CEO & Founder

1 BILLION MILES

8 MILLION JOBS
60 SECTORS

JOBWATCH IS READY TO GO, WHATEVER BUSINESS YOU'RE IN

We're transforming businesses of all sizes throughout the UK and the rest of the world. We work with over 60 sectors using one product configured to create sector-specific versions of JobWatch, complete with instant customisation and experts who understand your industry.

And it's a difference that really does go a long way.

Jobs

BigChange and Sheffield City Council

- ❖ Working together for two years following a Tender process
- ❖ Using two BigChange products:
 - ❖ Vehicle Tracking with Driver Mobile App
 - ❖ JobWatch Mobile Workforce App with CRM



Sheffield City Council

SEN Operations

Transport



Transport

SEN Background

- ❖ 6.3 million pound spend
- ❖ 2,575 jobs per day
- ❖ 489,250 jobs per school year
- ❖ 6938 (internal) miles per day
- ❖ 1,318,220 (internal) miles per school year

- ❖ Internal spend
 - ❖ 5 million pound spend
 - ❖ 1029 SEN passengers
- ❖ External spend
 - ❖ 1.3 million pound spend
 - ❖ 166 SEN passengers



Transport

Why did we do it?

- ❖ Customer Service
- ❖ Risk
- ❖ Sub-Contractors
- ❖ Processes
- ❖ Budget



Transport

Issues: Customer Service

- ❖ Automatic Alerts when Transport is cancelled or delayed
- ❖ Automatic Alerts when the vehicle is near your home
- ❖ Notification of Driver and Passenger Assistant changes (including pictures)
- ❖ Digital access to raise concerns / complaints about the service
- ❖ Ability to see where the vehicle is on its journey



Transport

Solution: Text Message Vehicle arrival notification

Dear parent, Please be informed that the below operative will be arriving at your location at an estimated time of 16:08 to collect your child.

Operative name: Mark Betts

Phone No. [+447972078753](tel:+447972078753)

Vehicle Reg: FD08EVW

Regards Transport Services



Solution: Driver and vehicle ID

RE: Jobwatch alert - Job status changed - On the way - Mark Betts - Message (HTML)

File Message Insert Options Format Text Review

Cut Copy Paste Format Painter Clipboard

Times New F 12 A A

B I U

Address Book Check Names Attach File Attach Item Signature

Follow Up High Importance Low Importance Tags Zoom

To... JobWatch <jobwatch@bigchangeapps.com>


Cc...

Subject: RE: Jobwatch alert - Job status changed - On the way - Mark Betts

Dear parent,

Please be informed that the below operative will be arriving at 16:03 to collect your child.

Operative Name: Mark Betts
Operative Phone No. +447972078753
Operative ID:



Regards

See more about: JobWatch.

15:55 12/06/2019



Transport

Issues: Risk

- ❖ Passenger operations
 - ❖ Driver behaviour
 - ❖ Passenger registers
- ❖ Vehicle checks
- ❖ Visible risk assessments and SSOW



Transport

Solution: Driver Behavior













Transport

Solution: Driver Behavior

Driver Behaviour Report

From 04/06/2019
To 11/06/2019

Resource	Distance (mi)	MPG	CO2 (Kg)	Cruise control	Idling	Over-speeding	Harsh acceleration	Harsh braking	Cornering	Score
 Sergio Smith	903		174	00:00:00	9.3	6.8	10	10	9.9	9.2 
 Eric Cantona	248			00:00:00	10	8.2				9.1 
 John Anthony	341		66	00:00:00	5.8	9.4	10	10	9.6	9.0 
 Jo Alexander	884	7.53		02:24:40 6%	0.6	3.7	10	7.2	10	6.3 



Transport

Solution: Passenger Lists

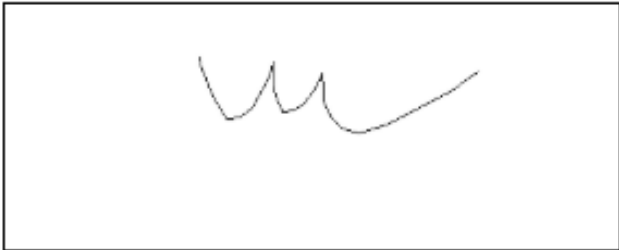
	12/06/2019 07:12	00:00	Leaving Depot on Time
	12/06/2019 06:59	00:00	Transported
	12/06/2019 07:20	00:00	Transported
	12/06/2019 07:15	00:02	Transported
	12/06/2019 07:10	00:05	Transported
	12/06/2019 06:55	00:07	Transported
	12/06/2019 06:52	00:18	Transported
	12/06/2019 07:26	00:00	Transported
	12/06/2019 07:00	00:00	Transported
	12/06/2019 07:13	00:02	Transported
	12/06/2019 07:11	00:04	Transported
	12/06/2019 07:48	00:00	Leaving Depot on Time
	12/06/2019 07:17	00:04	Not Transported



Transport

Solution: Passenger Operations

View job

Job result	WorkSheets
Status date	12/06/2019 16:51
Status	Completed with issues - Not Transported
Resource	MARK BETTS
Resource notes	The child was unwell
Customer notes	
Print name and signature	m barlow
	
Mark as actioned	<input type="checkbox"/> Actioned
Office notes	This is the third time in a row this has happened, need to investigate further





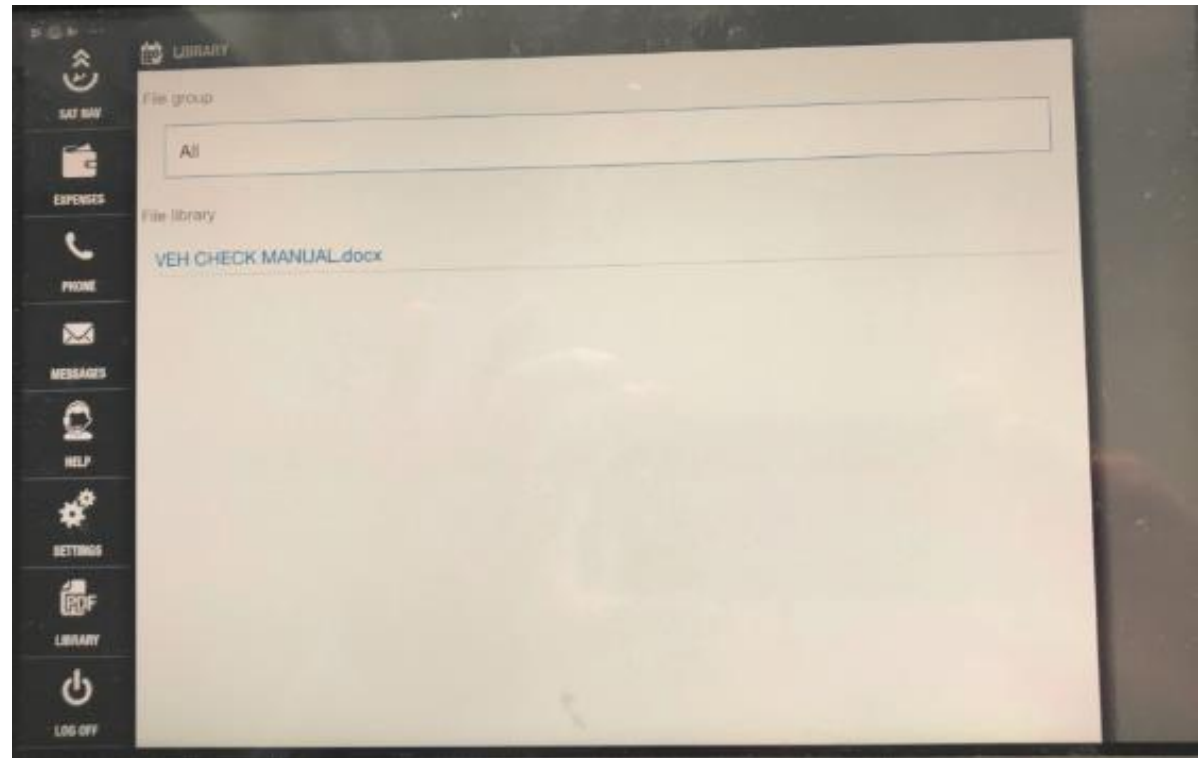
Solution: Passenger Operations

Date	Owner	Job status	Comment
12/06/2019 16:51	MARK BETTS	Completed with issues	Not Transported
12/06/2019 16:50	MARK BETTS	Started	
12/06/2019 16:50	MARK BETTS	On the way	
12/06/2019 16:48	MARK BETTS	Accepted	
12/06/2019 16:48	MARK BETTS	Sent	
12/06/2019 16:47	Mark Betts	Scheduled	
12/06/2019 16:47	Mark Betts	New	



Transport

Solution: Risk Assessments and Safe Systems of Work





Transport

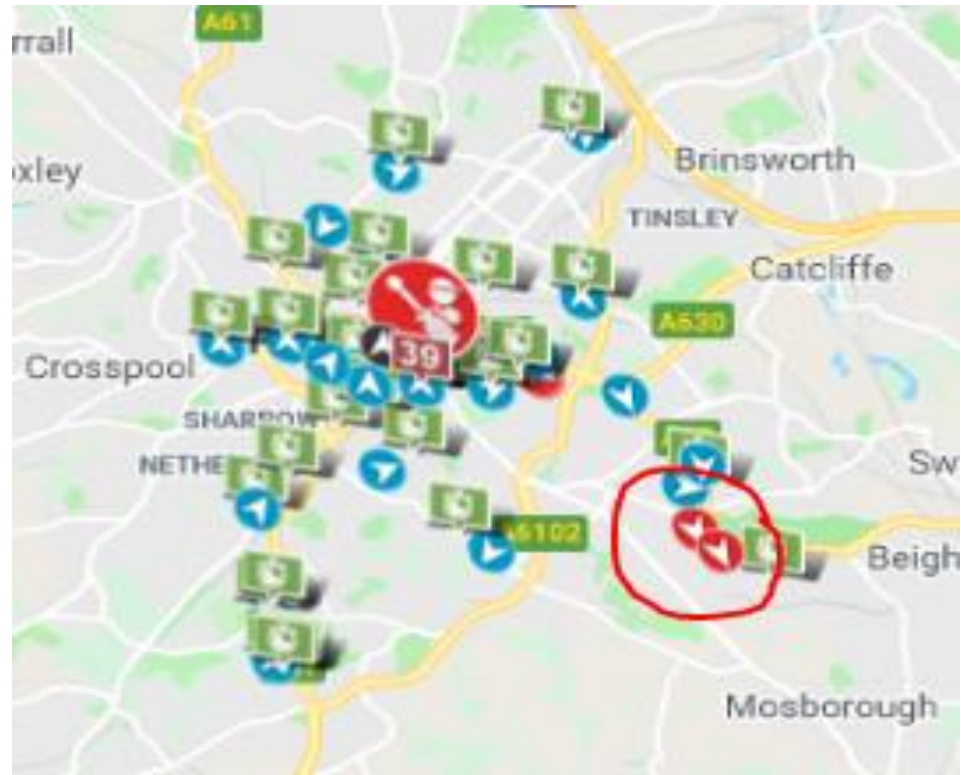
Issues: Sub-Contractors

- ❖ Operational transparency
- ❖ Vehicle compliancy
- ❖ Passenger lists
- ❖ Invoices



Transport

Solution: Sub-contractor GPS tracking






Solution: Sub-contractor driver and vehicle ID

RE: Jobwatch alert - Job status changed - On the way

Dear parent,

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Operative Name: Mark Betts
Operative Phone No. +447972078753
Operative ID: 

Regards

See more about: JobWatch.

15:55
12/06/2019

Dear parent, Please be informed that the below operative will be arriving at your location at an estimated time of 16:08 to collect your child.
Operative name: Mark Betts
Phone No. +447972078753
Vehicle Reg: FD08EVW
RegardsTransport Services



Solution: Automated Invoices

Sheffield City Council SEN



VAT Reg No:



Transport

INVOICE

Reference	
Date	12/06/2019
Job reference	
Order number	
Account reference	

Quantity	Description	Unit price	VAT %	VAT	Gross amount
1.000		11.00	20.00	2.20	13.20
1.000	Base Rate	25.00	0.00	0.00	25.00
1.000	PA Charge	8.00	0.00	0.00	8.00

Bank details
Payment terms: 30 days

Total ex VAT	£44.00
Total Tax	£2.20
Total	£46.20



Transport

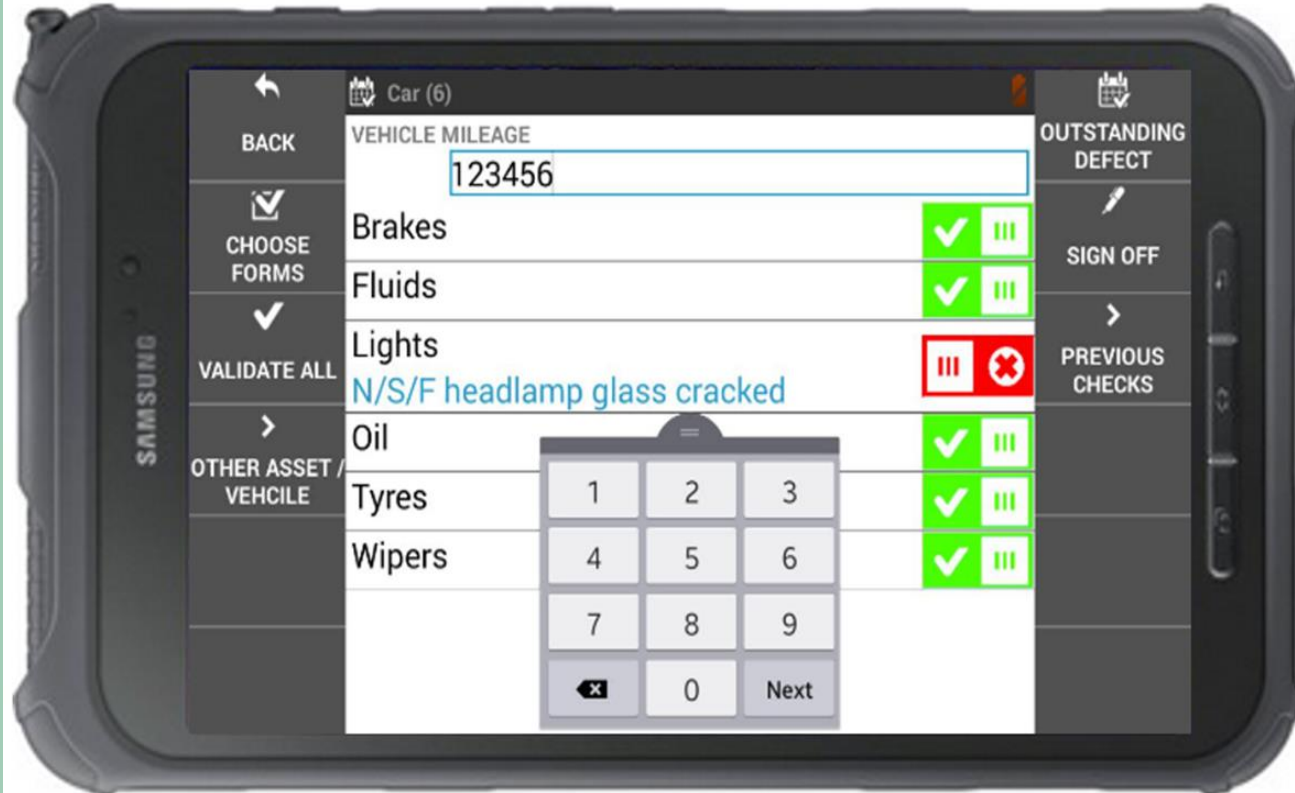
Issues: Processes

- ❖ Vehicle checks
- ❖ Payroll
- ❖ Run sheets
- ❖ Route sheets
- ❖ Absences



Solution: Vehicle Checks

Transport

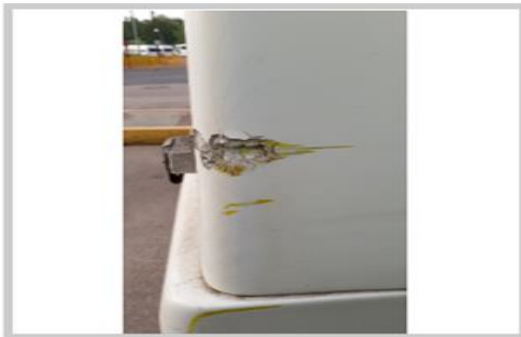




Solution: Vehicle Checks

Defect

Resource Compliance Officer
Defect type Body Exterior
Date 07/05/2019 07:34
Notes PREVIOUS BODY DAMAGE
UNREPORTED
Comment
Actioned 14/05/2019 10:56
Defect archived since 14/05/2019 10:56



Dialogue

Mark Ramsbottom 08/05/2019 07:23
Repair at a later date when vehicle is free.

+
Add



Close



Save



Solution: Vehicle Checks


Transport


Driver Check

Resource **Compliance Officer**
Vehicle **FH05DTU**
Odometer **16,550 mi**

07/05/2019 07:34

Transporter

<input checked="" type="checkbox"/> Access and Exit Routes Clear	<input checked="" type="checkbox"/> Body Exterior PREVIOUS BODY DAMAGE UNREPORTED
<input checked="" type="checkbox"/> Brakes	
<input checked="" type="checkbox"/> Excessive Engine Exhaust Smoke	<input checked="" type="checkbox"/> Doors and Exits Unlocked
<input checked="" type="checkbox"/> First Aid Kit	<input checked="" type="checkbox"/> Fire Extinguisher
<input checked="" type="checkbox"/> Glass/Windscreen	<input checked="" type="checkbox"/> Fuel/Oil Check
<input checked="" type="checkbox"/> Indicators/Lights	<input checked="" type="checkbox"/> Horn
<input checked="" type="checkbox"/> Mirrors	<input checked="" type="checkbox"/> Livery / Decals
<input checked="" type="checkbox"/> Reflectors	<input checked="" type="checkbox"/> Other Minor Defect (Give Description)
<input checked="" type="checkbox"/> Seats and Seatbelts	<input checked="" type="checkbox"/> Registration Plates
<input checked="" type="checkbox"/> Security and Operation of Doors	<input checked="" type="checkbox"/> Section 19 Disc In Date and Visible
<input checked="" type="checkbox"/> Tyres and Wheel Fixings	<input checked="" type="checkbox"/> Steering
	<input checked="" type="checkbox"/> Windscreen Washers/Wipers

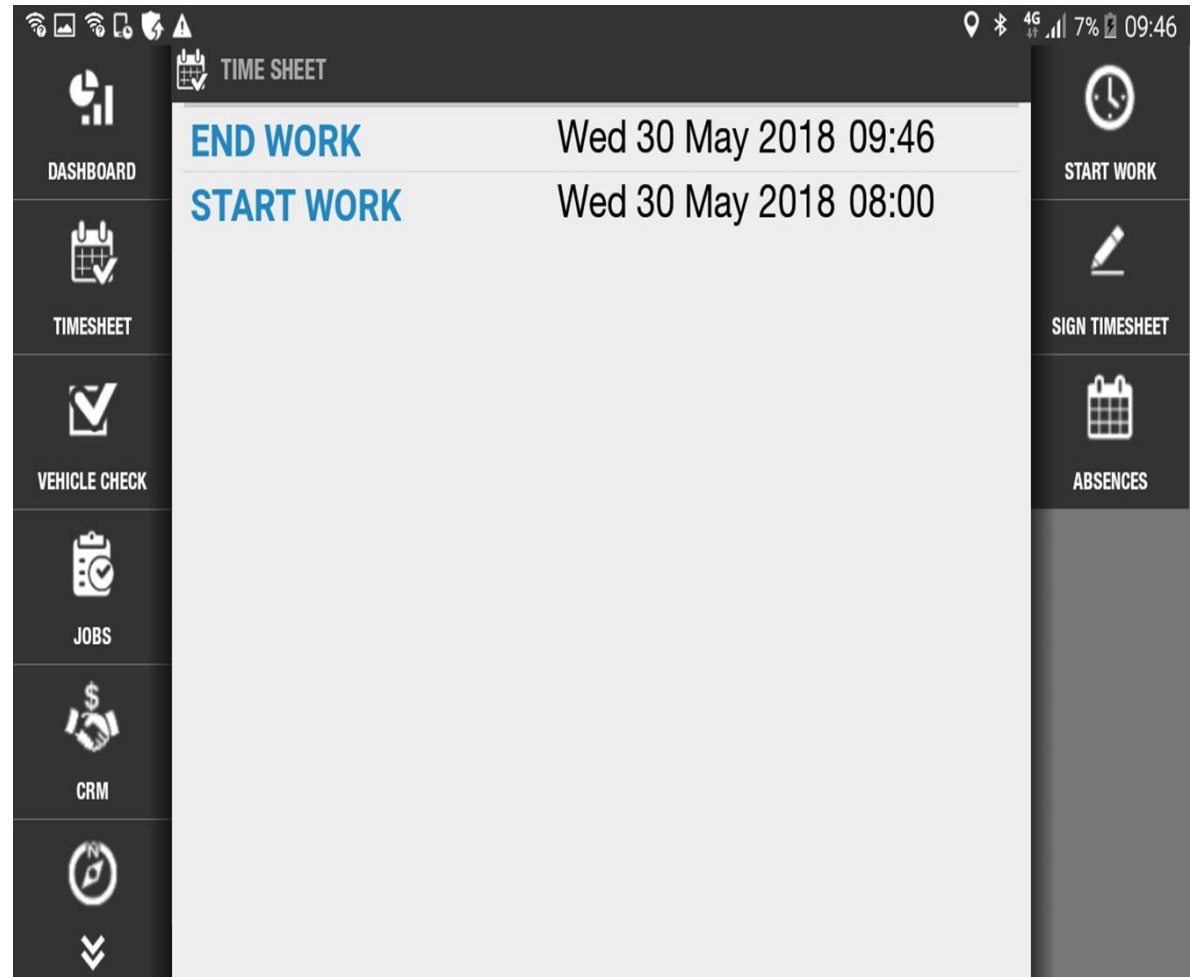


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Transport

Solution: Payroll





Solution: Dynamic Scheduling System

Screenshot of a web browser displaying the Sheffield City Council Dynamic Scheduling System interface.

Browser: Schedule | <https://clients.bigchangeapps.com/jobschedule.aspx>

Navigation: Dashboard, SCHEDULE (10), Stock & Equipment, CRM, Fleet & Resources (4), Messages, Alerts (334), Reports, Map, Network, Road Crew, My Account.

Search: Search anything... powered by BigChange

Calendar: Thu 13 Jun 2019

Left Panel (DISPLAY):

- UNDESCHEDULED JOBS
- Search:
- Due before:
- Hide all
- Uncategorised: 2
- CSSR: 0
- Driving Assessment/Training: 0
- Facilities Management: 0
- Property Manager Core Offer: 65
- Stores - Planned: 4
- Stores - Voids: 0
- Stores - Waste Collection: 2

Main Schedule View:

Person	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
ALEX DAWSON	[Blue chevron pattern]									[Job icon]	[Job icon]	[Job icon]	[Job icon]												00:03 04:00
ANDREW BROOK										[Job icon]	[Job icon]	[Job icon]	[Job icon]	[Job icon]											00:00 05:00
MARK BETTS	[Blue chevron pattern]									[Job icon]	[Job icon]	[Job icon]	[Job icon]	[Job icon]											00:32 04:00
MICK HAGUE																									00:00

Bottom Panel (ROUTES):

[Empty ROUTES section]

System Tray: 20:31, 12/06/2019



Solution Absences

Add / edit a note

Detail

Workflow

Note flags

Notes

1st Day of Sickness Reporting

Question	Answer	Notes
Can you give an estimated return to work date? *	No	
Have you arranged to see your doctor? *	No	
Can you please provide a contact number for us to contact you if necessary? *	12345	
Inform the employee they need to call us and speak to their supervisor on day 4 if they are still absent *	Yes	
Inform the employee that we have the right to contact them if necessary whilst they are off sick *	Yes	

4th Day of Sickness Reporting

Question	Answer	Notes
Inform the employee that we now require a self-certification form for today and if the absence continues for up to day 7	<input type="radio"/> No <input type="radio"/> Yes	
Inform the employee that if they intend to return to work on day 8 they must inform their supervisor as early as possible but no later than 07:00am	<input type="radio"/> No <input type="radio"/> Yes	
Inform the employee that if they do not return to work on day 8 they will need to see their GP to obtain a Statement of Fitness Work Note	<input type="radio"/> No <input type="radio"/> Yes	

8th Day of Sickness Reporting

Question	Answer	Notes
Telephone the employee if the employee fails to phone in to inform us that they are still unfit to return to work	<input type="radio"/> No <input type="radio"/> Yes	
Inform the employee that they will now need to send a self-certification form for the 1st week of their absence	<input type="radio"/> No <input type="radio"/> Yes	
Ask the employee for the contents of the Statement of Fitness to Work Note from their GP	<input type="text"/>	
Inform the employee that they will need to keep us informed with details of a	<input type="text"/>	



Cancel



Save



Transport

Issues: Budget

- ❖ Since 2011, Sheffield City Council has seen its total budget reduced by £430 million
- ❖ 33% reductions in Transport Service's back office staff since 2014
- ❖ Since 2014, SEN passengers have increased by 16%
- ❖ The Transport charging model has remained static since 2014 but Transport's direct costs have increased



Transport

Solutions: Budget

- ❖ Reduced back office staff due to efficient processes
- ❖ Reduced paper and printing costs by going paperless
- ❖ Reduced operational costs by using the system functionalities to focus on driving and job times



Transport

How did we do it?

- ❖ Created an internal project team
- ❖ Trained 20 drivers per week over 7 week period
- ❖ Went live on September 2018
- ❖ Kept an agile approach to the project
- ❖ Learnt from internal operations before going external
- ❖ Trained 40 taxi drivers (training still ongoing)
- ❖ Went live for external operations April 2019
- ❖ Gained buy in from the Transport Director and Head of Service



Transport

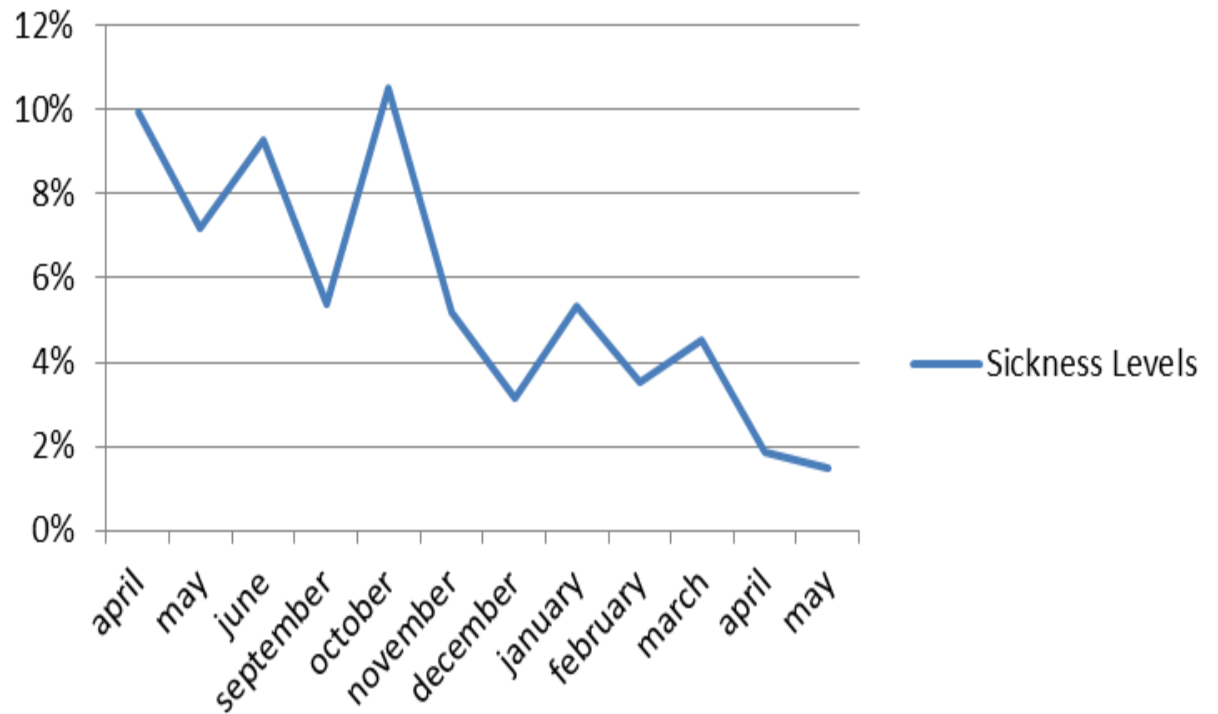
Benefits Gained



Benefits: Absences

Transport

2018/19 Sickness Levels





Transport

Benefits: Processes

❖ 4600 hours saved reducing inefficient processes



Transport

Benefits: Budget

- ❖ £102K savings in back office reductions
- ❖ £6K savings by reducing paper and printing run and route sheets
- ❖ £4K savings by digitalising vehicle checks and defect sheets
- ❖ £51K savings by reducing driver and assistants job times



Transport

Benefits: Customer Feedback

“Great idea!! The alert lets you know how long it will be until the school bus arrives to pick up your child”.

“Found the alert system extremely useful as it can take a while to get my son in his wheelchair and he would get hot if he was sat waiting in his wheelchair with his coat on for too long”

“The alert gives me time to sort everything out ready for school. I know exactly what time I need to be home ready for my child being dropped off”



Transport

Benefits: Customer Feedback

“My son waits for the text. He then puts his shoes on and keeps looking for the bus. It helps with my son’s routine.”

“I now can wait until I get the alert before I put my daughter’s coat on so she is not sat for a while waiting in her coat. The alerts also make sure I’m ready to collect her from Transport”

“The alert tells you the approximate time of arrival of your school bus. Also you get to know what time your child should be ready for.”

Summary

Using Software to improve workforce productivity



BACK OFFICE
CRM



JOB
SCHEDULING



MOBILE
WORKFORCE APP



VEHICLE AND
ASSET TRACKING



ON-DEMAND
BOOKING APP





**THANK YOU.
ANY QUESTIONS?**

