

Technology for Fleet Management

With Dan Smoller

The Centers for Habilitation

Housekeeping

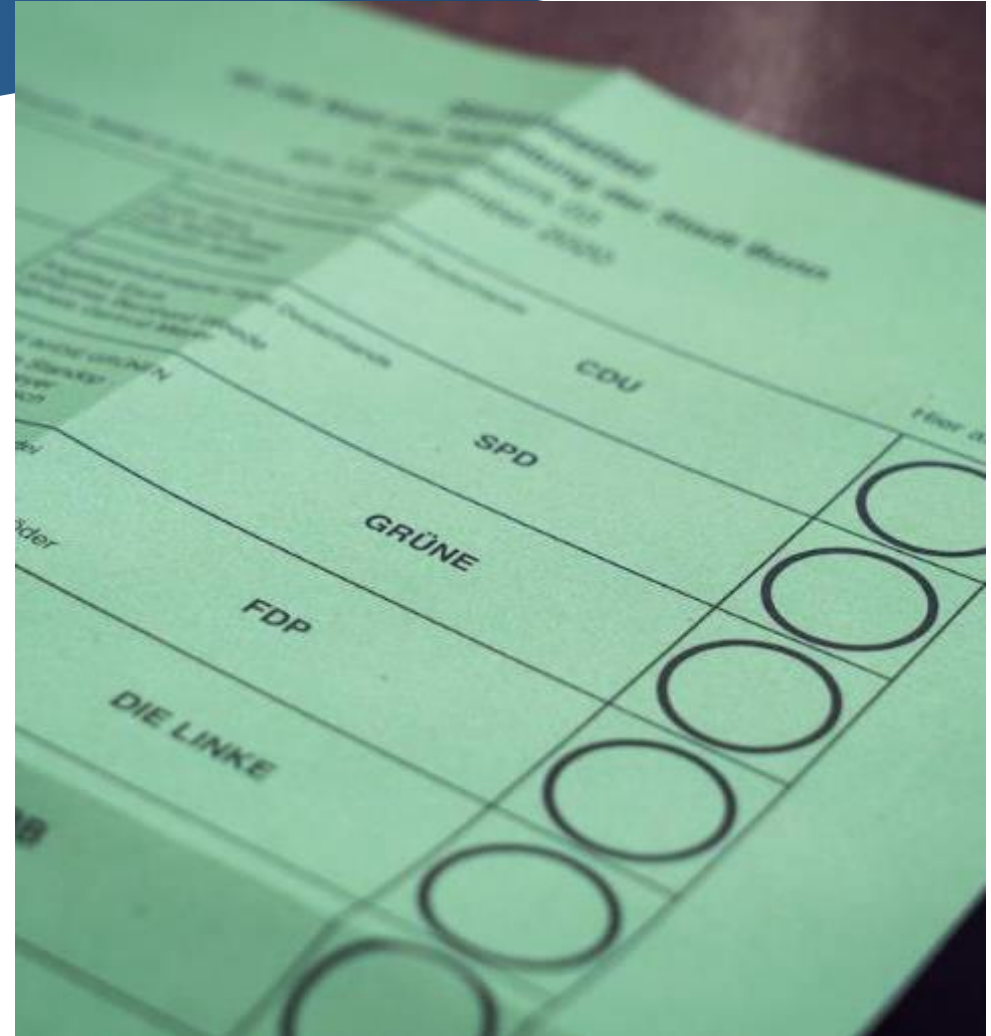
- Enter comments and questions into the chat box
- Keep your microphone muted
- Please turn your camera **ON** during the presentation
- This presentation is being **recorded**
- Questions will be answered at the end of session
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Enhancing Mobility Through Technology

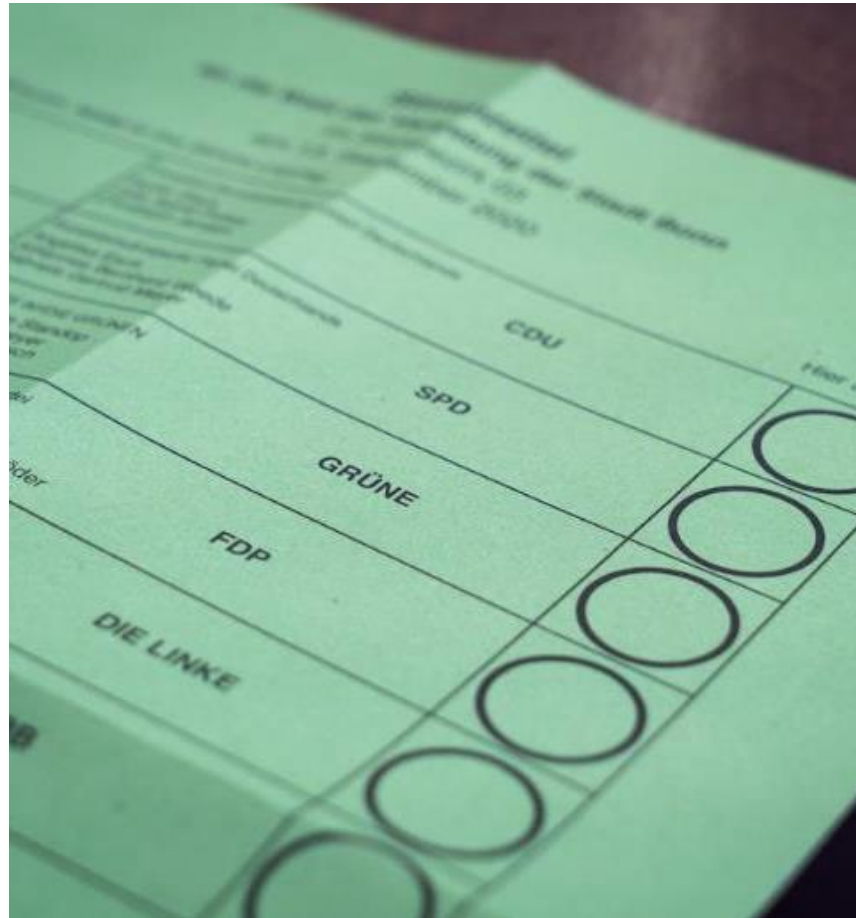
How many vehicles does your organization have?

- None
- 1-5
- 6-10
- 11-20
- 21-50
- 50+



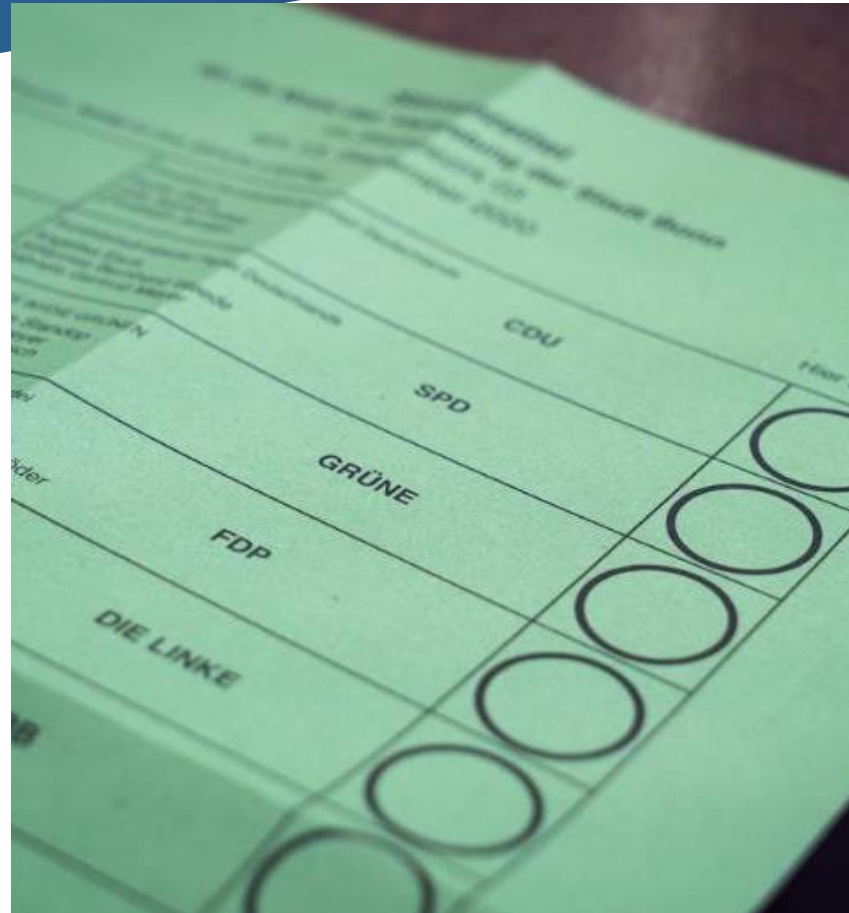
Does your organization use any software for scheduling, dispatching or record maintenance?

- Yes
- No
- Not sure



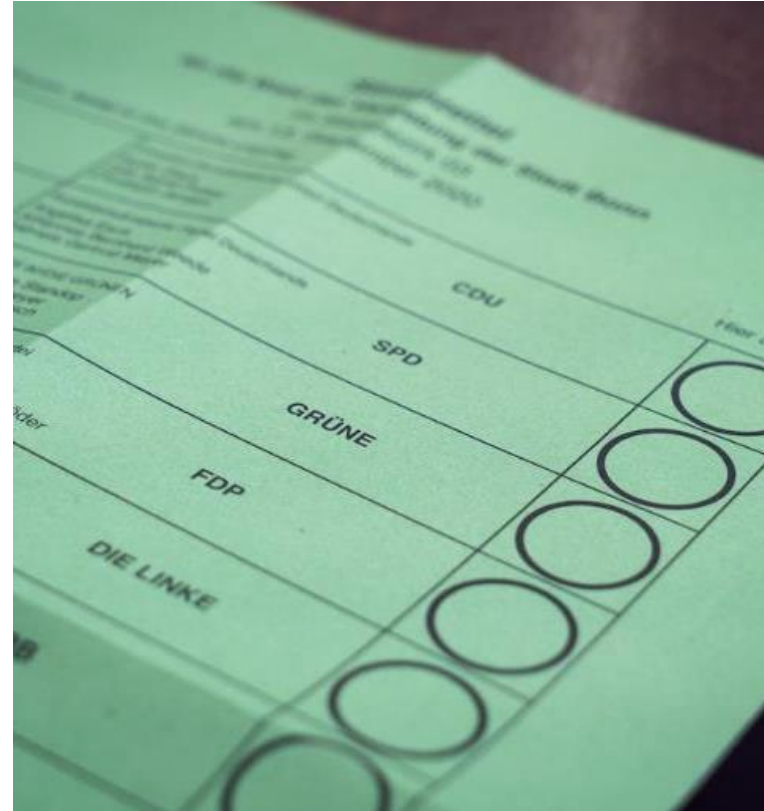
Does your organization use any type of vehicle tracking system?

- Yes
- No
- Not sure



What format does your organization maintain vehicle and other grant related data reporting information?

- Hard copies (paper)
- Electronically
- Both
- None



Using Software for Fleet Maintenance and record keeping

- Computerized Maintenance Management Software (CMMS)
FiiX System



Using software to automate maintenance tracking

- You can create an “asset” or digital identity for each vehicle where you can combine pictures, service records, meter readings, inventory tracking, and create automated maintenance reminder tickets all in one centrally located place

EQUIPMENT

Van 160 Online

FT00160 - Van 160
Online
Set Offline
Fleet / Facilities
Lodge

Code: FT00160
Category: Equipment

QR Code

General | Parts/BOM | Metering/Events | Personnel | Warranties | Businesses | Purchasing | Files

Custom | Log

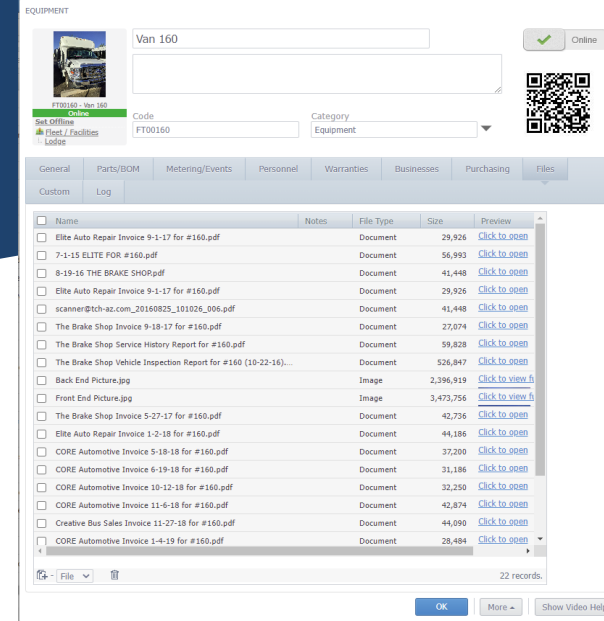
<input type="checkbox"/>	Name	Notes	File Type	Size	Preview
<input type="checkbox"/>	Elite Auto Repair Invoice 9-1-17 for #160.pdf		Document	29,926	Click to open
<input type="checkbox"/>	7-1-15 ELITE FOR #160.pdf		Document	56,993	Click to open
<input type="checkbox"/>	8-19-16 THE BRAKE SHOP.pdf		Document	41,448	Click to open
<input type="checkbox"/>	Elite Auto Repair Invoice 9-1-17 for #160.pdf		Document	29,926	Click to open
<input type="checkbox"/>	scanner@tch-az.com_20160825_101026_006.pdf		Document	41,448	Click to open
<input type="checkbox"/>	The Brake Shop Invoice 9-18-17 for #160.pdf		Document	27,074	Click to open
<input type="checkbox"/>	The Brake Shop Service History Report for #160.pdf		Document	59,828	Click to open
<input type="checkbox"/>	The Brake Shop Vehicle Inspection Report for #160 (10-22-16)....		Document	526,847	Click to open
<input type="checkbox"/>	Back End Picture.jpg		Image	2,396,919	Click to view fi
<input type="checkbox"/>	Front End Picture.jpg		Image	3,473,756	Click to view fi
<input type="checkbox"/>	The Brake Shop Invoice 5-27-17 for #160.pdf		Document	42,736	Click to open
<input type="checkbox"/>	Elite Auto Repair Invoice 1-2-18 for #160.pdf		Document	44,186	Click to open
<input type="checkbox"/>	CORE Automotive Invoice 5-18-18 for #160.pdf		Document	37,200	Click to open
<input type="checkbox"/>	CORE Automotive Invoice 6-19-18 for #160.pdf		Document	31,186	Click to open
<input type="checkbox"/>	CORE Automotive Invoice 10-12-18 for #160.pdf		Document	32,250	Click to open
<input type="checkbox"/>	CORE Automotive Invoice 11-6-18 for #160.pdf		Document	42,874	Click to open
<input type="checkbox"/>	Creative Bus Sales Invoice 11-27-18 for #160.pdf		Document	44,090	Click to open
<input type="checkbox"/>	CORE Automotive Invoice 1-4-19 for #160.pdf		Document	28,484	Click to open

File 22 records.

OK More Show Video Help

Using software to automate maintenance tracking

- Tickets can be customized by time for each individual asset – a fleet can be used very differently from one vehicle to the next.
- Reminders can be customized for each individual asset. This helps with scheduling and fleet dispatching to create a more predictable shift of vehicles when normal service is disrupted.
- Notes can be added when tickets are “in progress” so everyone is up to speed on the status.



Create annual reminders for registration/emissions/ADOT inspections

Monthly/quarterly tickets for cleaning/washing and routine services

SCHEDULED MAINTENANCE TRIGGER ×

Generate Work Order By Time Schedule

Generate Work Order By Meter Reading Trigger

Generate Work Order By Event Trigger

How Often

Hourly

Daily

Weekly

Monthly

Yearly

Every Days

Fixed

Floating

By setting a fixed date trigger, you are indicating you wish the next trigger date to always occur on the date triggers you have set.

From When And For How Long

Start On

Trigger Time (?)

No End Date

End By

Create Work Order On Start Date

Work Orders Dashboard: Open Work Orders

HIT ENTER to start search

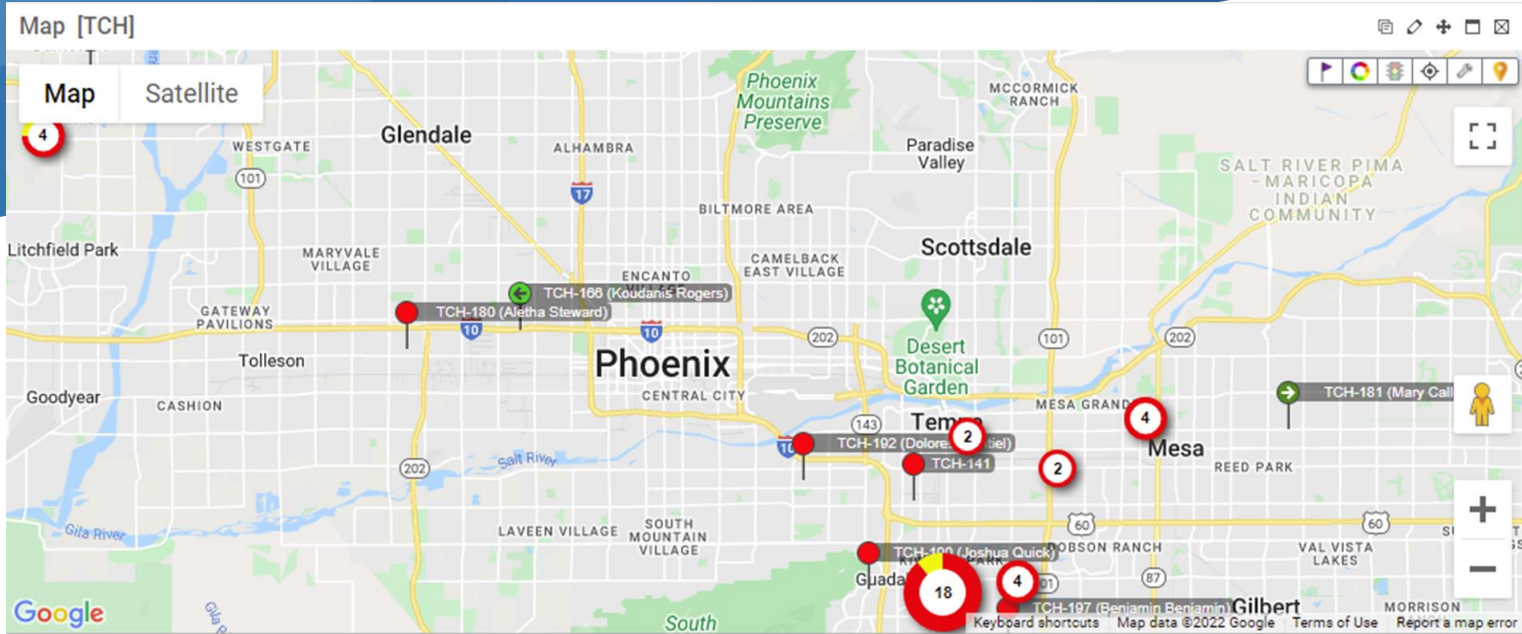
Description	Date Created	Priority	Assets	Assigned Us	Status	Type	Scheduled	Date Last Modified
<input type="checkbox"/> Dump run for sofa in the garage	May 03, 2022 05:00:12 PM	Medium...	Standage (GH2206D...	Fleet & F...	Open	Move Heavy Objects		May 04, 2022 08:02:3
<input type="checkbox"/> Drum in the washer is loose	May 03, 2022 04:56:08 PM	Medium...	Standage (GH2206D...	Fleet & F...	Open	Plumbing		May 04, 2022 08:02:3
<input type="checkbox"/> patio awning detached from cement. Is not supported on the right side by the flower plant.	May 02, 2022 06:14:42 PM	High (2...	Mitchell (GH2212DD)	Fleet & F...	Open	Safety		May 03, 2022 10:00:4
<input type="checkbox"/> Van 164 A/C stopped blowing	May 02, 2022 09:10:09 AM	Critical (...)	Fleet / Facilities (A18...	Fleet & F...	Open	Service Request		May 03, 2022 10:00:5
<input type="checkbox"/> Seat Belt Inspection	May 02, 2022 12:00:11 AM	Medium...	Van 144 (FT0144)	Fleet & F...	Open	Safety	SM424	May 04, 2022 08:02:3
<input type="checkbox"/> Seat Belt Inspection	May 02, 2022 12:00:10 AM	Medium...	Van 141 (FT0141)	Fleet & F...	Open	Safety	SM416	May 04, 2022 08:02:3
<input type="checkbox"/> Seat Belt Inspection	May 02, 2022 12:00:10 AM	Medium...	Van 142 (FT0142)	Fleet & F...	Open	Safety	SM415	May 04, 2022 08:02:3
<input type="checkbox"/> Change air filter 20 x 25 x 1	May 01, 2022 12:00:12 AM	Medium...	47th Pl HVAC Unit 1...	Fleet & F...	Open	Preventive	SM200	May 01, 2022 12:00:1
<input type="checkbox"/> Annual Maintenance on Allegheny Shredder	May 01, 2022 12:00:12 AM	Medium...	Allegheny 1000C-SE...	ASDD Op...	Open	Preventive	SM362	May 01, 2022 12:00:1
<input type="checkbox"/> Elite Mobile Auto Detailing is scheduled for one Saturday/month.	May 01, 2022 12:00:12 AM		Van 26 (FT0026)	Fleet & F...	Open	Vehicle Wash	SM433	May 01, 2022 12:00:1
<input type="checkbox"/> Lube, Oil, & Filter Every 3,000 Miles or 90 Days	Apr 30, 2022 12:00:07 AM	Medium...	Van 180 (FT00180)	Fleet & F...	Open	Preventive	SM510	Apr 30, 2022 12:00:07
<input type="checkbox"/> Gone about 4k miles... due but low priority, when the shops slow down	Apr 30, 2022 12:00:07 AM	Medium...	Van 181 (FT00181)	Fleet & F...	Work In Progress	Preventive	SM511	Apr 30, 2022 06:30:36
<input type="checkbox"/> LOF	Apr 24, 2022 12:00:06 AM	Medium...	Van 171 (FT0171)	Fleet & F...	Open	Preventive	SM501	Apr 24, 2022 12:00:06
<input type="checkbox"/> LOF	Apr 24, 2022 12:00:06 AM	Medium...	Van 155 (FT0155)	Fleet & F...	Work In Progress	Preventive	SM486	May 04, 2022 08:58:4
<input type="checkbox"/> LOF (Pickup 4/28)	Apr 24, 2022 12:00:06 AM	Medium...	Van 160 (FT00160)	Fleet & F...	Work In Progress	Preventive	SM490	May 04, 2022 10:32:0
<input type="checkbox"/> Remove cubicle desk in training room... take to Group Home?	Apr 20, 2022 05:47:58 PM	Low (10...	Human Resources (L...	Fleet & F...	Open	Move Heavy Objects		Apr 21, 2022 12:33:46
<input type="checkbox"/> Lube, Oil and Filter	Apr 12, 2022 12:00:09 AM	Medium...	Truck 122 (FT0122)	Fleet & F...	Open	Preventive	SM159	Apr 12, 2022 08:21:43
<input type="checkbox"/> Lube Oil and Filter	Apr 10, 2022 12:00:08 AM	Medium...	Car 137 (FT0137)	Fleet & F...	Open	Preventive	SM9	Apr 10, 2022 12:00:08
<input type="checkbox"/> LOF (scheduled 4/22 @ The Brake Shop)	Apr 08, 2022 12:00:11 AM	Medium...	Van #165 (FT00165)	Fleet & F...	Work In Progress	Preventive	SM495	Apr 21, 2022 08:40:32
<input type="checkbox"/> Last LOF 1/12/22 @ 64k	Apr 08, 2022 12:00:11 AM	Medium...	Car 143 (FT0143)	Fleet & F...	Open	Preventive	SM173	Apr 08, 2022 02:41:10
<input type="checkbox"/> See Attached Maintenance log for specific scheduled maintenance tasks Check every three months t...	Apr 05, 2022 12:00:06 AM	Low (10...	Titan 875 HydraMast...	Fleet & F...	Open	Preventive	SM335	Apr 11, 2022 08:23:32
<input type="checkbox"/> The pipe above the roll-up door is leaking water, when it rains it starts leaking. (Per Josh)	Mar 29, 2022 07:04:54 AM	High (2...	ASDD (AS182500)		Open	Plumbing		Mar 29, 2022 08:11:11
<input type="checkbox"/> Please have our swamp coolers checked and service for the upcoming season. Earlier the better for ...	Mar 25, 2022 02:35:03 PM	Medium...	ASDD (AS182500)		Work In Progress	Service Request		Mar 25, 2022 02:45:51
<input type="checkbox"/> LOF needed. 4/30 100 miles before due	Mar 25, 2022 12:00:09 AM	Medium...	Van 152 (FT0152)	Fleet & F...	Work In Progress	Preventive	SM454	Apr 30, 2022 06:31:56
<input type="checkbox"/> Raised flower beds need new drip lines and possible time clock. Thanks, Jean I will help :)	Mar 24, 2022 07:51:03 AM	Medium...	Lodge (LG110400)	Fleet & F...	Work In Progress	Plumbing		Mar 24, 2022 03:43:41
<input type="checkbox"/> ice maker not working	Mar 16, 2022 05:19:39 PM	Low (10...	Carmen Refrigerator...	Fleet & F...	Work In Progress	Plumbing		Mar 22, 2022 03:28:31
<input type="checkbox"/> screen doors need to be replaced on both arcadia doors, mainly office area	Mar 12, 2022 09:03:56 AM	Low (10...	Tulane (GH2213DD)	Fleet & F...	Open	Damage		Mar 14, 2022 08:06:2
<input type="checkbox"/> back bathroom door will be falling off soon. hard to close and very loose	Mar 12, 2022 09:02:30 AM	Low (10...	Tulane (GH2213DD)	Fleet & F...	Open	Damage		Mar 14, 2022 08:06:2

- Scan records and invoices to individual assets.
- Assign tasks.
- Run reports.

Global Positioning System (GPS)



Why use GPS?



- Real-time tracking (see current vehicle location)
- Improve safety (identify risky driving behaviors)
- Track vehicles idle time (cost saving)
- Find a vehicle in an emergency (driver not sure of exact location)

Selected Vehicle: TCH-170

Wed May 4, 2022

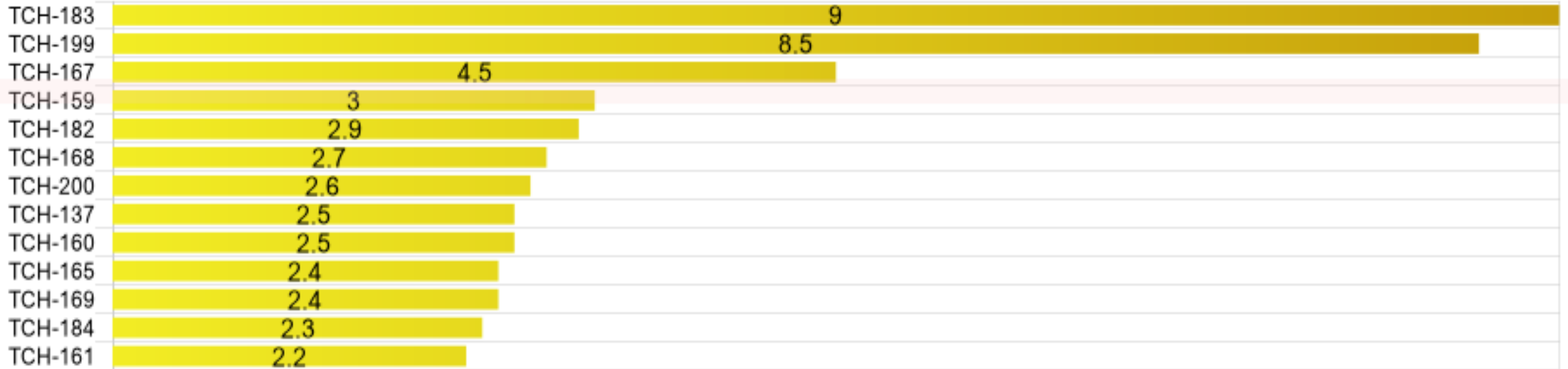
Time	Driver	Ignition	Max Speed	Avg Speed	Inst Speed	Speed Limit	Max Accel	Max Decel	Distance	Odometer	Voltage	Run Time	Latitude	Longitude	Location
7:20:56 AM	[REDACTED]	On	0 mph	0 mph	0 mph N	-	0.000 g	0.000 g	0.0 mi.	49,084.4	14.20v	95,570 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:21:02 AM	[REDACTED]	On	0 mph	0 mph	0 mph N	-	0.000 g	0.000 g	0.0 mi.	49,084.4	14.26v	95,570 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:22:58 AM	[REDACTED]	On	0 mph	0 mph	0 mph N	-	0.000 g	0.000 g	0.0 mi.	49,084.4	14.26v	95,572 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:24:58 AM	[REDACTED]	On	28 mph	9 mph	23 mph N	-	0.000 g	0.000 g	0.3 mi.	49,084.7	14.29v	95,574 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:26:58 AM	[REDACTED]	On	48 mph	22 mph	46 mph S	45 mph	0.000 g	0.000 g	1.0 mi.	49,085.4	14.32v	95,576 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:28:58 AM	[REDACTED]	On	46 mph	30 mph	10 mph W	-	0.000 g	0.000 g	2.0 mi.	49,086.4	14.32v	95,578 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:30:58 AM	[REDACTED]	On	32 mph	10 mph	29 mph S	-	0.000 g	0.000 g	2.3 mi.	49,086.7	14.23v	95,580 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:32:58 AM	[REDACTED]	On	46 mph	24 mph	46 mph S	45 mph	0.000 g	0.000 g	3.1 mi.	49,087.5	14.29v	95,582 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:34:58 AM	[REDACTED]	On	50 mph	45 mph	45 mph S	45 mph	0.000 g	0.000 g	4.6 mi.	49,089.0	14.29v	95,584 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:36:58 AM	[REDACTED]	On	45 mph	25 mph	20 mph E	-	0.000 g	0.000 g	5.4 mi.	49,089.8	14.26v	95,586 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:38:58 AM	[REDACTED]	On	20 mph	9 mph	0 mph NW	-	0.000 g	0.000 g	5.7 mi.	49,090.1	14.32v	95,588 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:40:58 AM	[REDACTED]	On	19 mph	3 mph	18 mph N	-	0.000 g	0.000 g	5.8 mi.	49,090.2	14.26v	95,590 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:42:58 AM	[REDACTED]	On	23 mph	15 mph	19 mph N	-	0.000 g	0.000 g	6.3 mi.	49,090.7	14.26v	95,592 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:44:58 AM	[REDACTED]	On	44 mph	23 mph	14 mph SE	45 mph	0.000 g	0.000 g	7.1 mi.	49,091.5	14.26v	95,594 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:46:58 AM	[REDACTED]	On	46 mph	29 mph	0 mph S	45 mph	0.000 g	0.000 g	8.1 mi.	49,092.5	13.92v	95,596 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:48:58 AM	[REDACTED]	On	37 mph	11 mph	0 mph NE	-	0.000 g	0.000 g	8.5 mi.	49,092.9	14.23v	95,598 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:50:58 AM	[REDACTED]	On	16 mph	1 mph	16 mph N	-	0.000 g	0.000 g	8.5 mi.	49,092.9	14.29v	95,600 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:52:58 AM	[REDACTED]	On	39 mph	14 mph	39 mph N	45 mph	0.000 g	0.000 g	9.0 mi.	49,093.4	14.26v	95,602 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:54:58 AM	[REDACTED]	On	46 mph	42 mph	44 mph N	45 mph	0.000 g	0.000 g	10.4 mi.	49,094.8	14.26v	95,604 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:56:58 AM	[REDACTED]	On	45 mph	34 mph	45 mph N	45 mph	0.000 g	0.000 g	11.5 mi.	49,095.9	14.26v	95,606 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
7:58:58 AM	[REDACTED]	On	46 mph	27 mph	46 mph N	45 mph	0.000 g	0.000 g	12.4 mi.	49,096.8	14.26v	95,608 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
8:00:58 AM	[REDACTED]	On	46 mph	23 mph	14 mph SE	45 mph	0.000 g	0.000 g	13.1 mi.	49,097.5	14.26v	95,610 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
8:02:58 AM	[REDACTED]	On	25 mph	11 mph	0 mph SE	-	0.000 g	0.000 g	13.5 mi.	49,097.9	14.17v	95,612 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
8:04:58 AM	[REDACTED]	On	10 mph	2 mph	6 mph E	-	0.000 g	0.000 g	13.6 mi.	49,098.0	14.17v	95,614 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦
8:05:36 AM	[REDACTED]	Off	6 mph	0 mph	0 mph E	-	0.000 g	0.000 g	13.6 mi.	49,098.0	12.52v	95,615 min	33.000000	-109.620000	Lodge Headquarters 🇬🇦

- Some GPS systems can send custom alerts for:
- Location, Speed, Idle time, Driving during odd hours, and more
- Different systems can be tailored to your needs. It can immediately notify a supervisor if a driver breaks any of the custom rules.

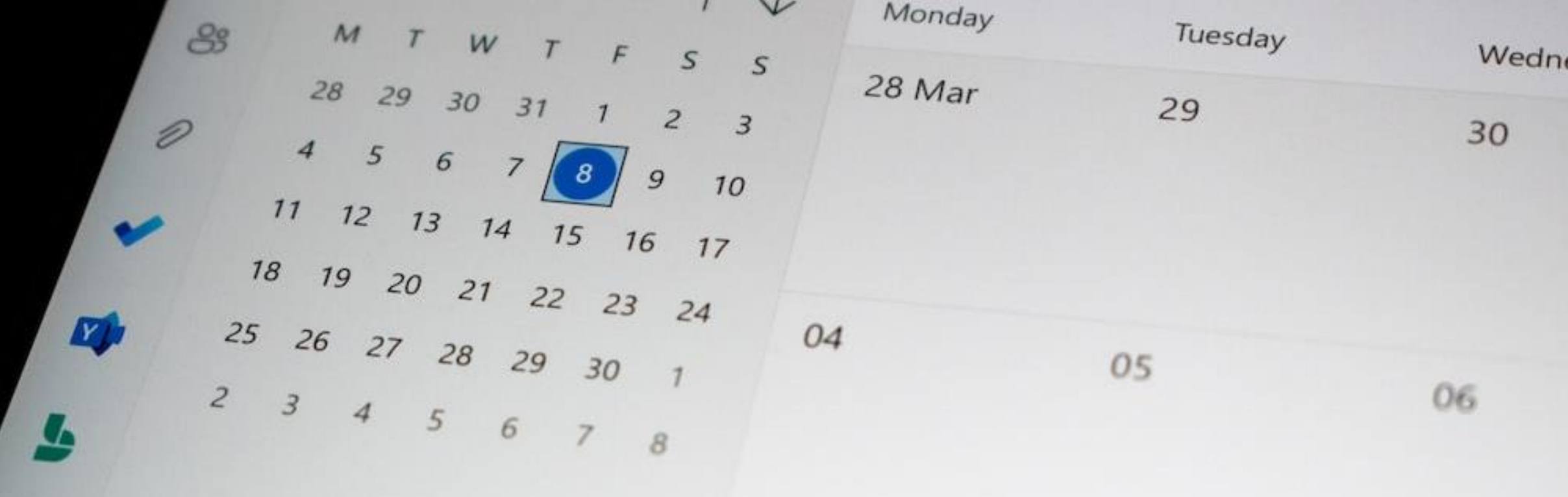
Group Graphs [TCH]



Idle Hours: 7 Days



Vehicle Scheduling/Dispatching

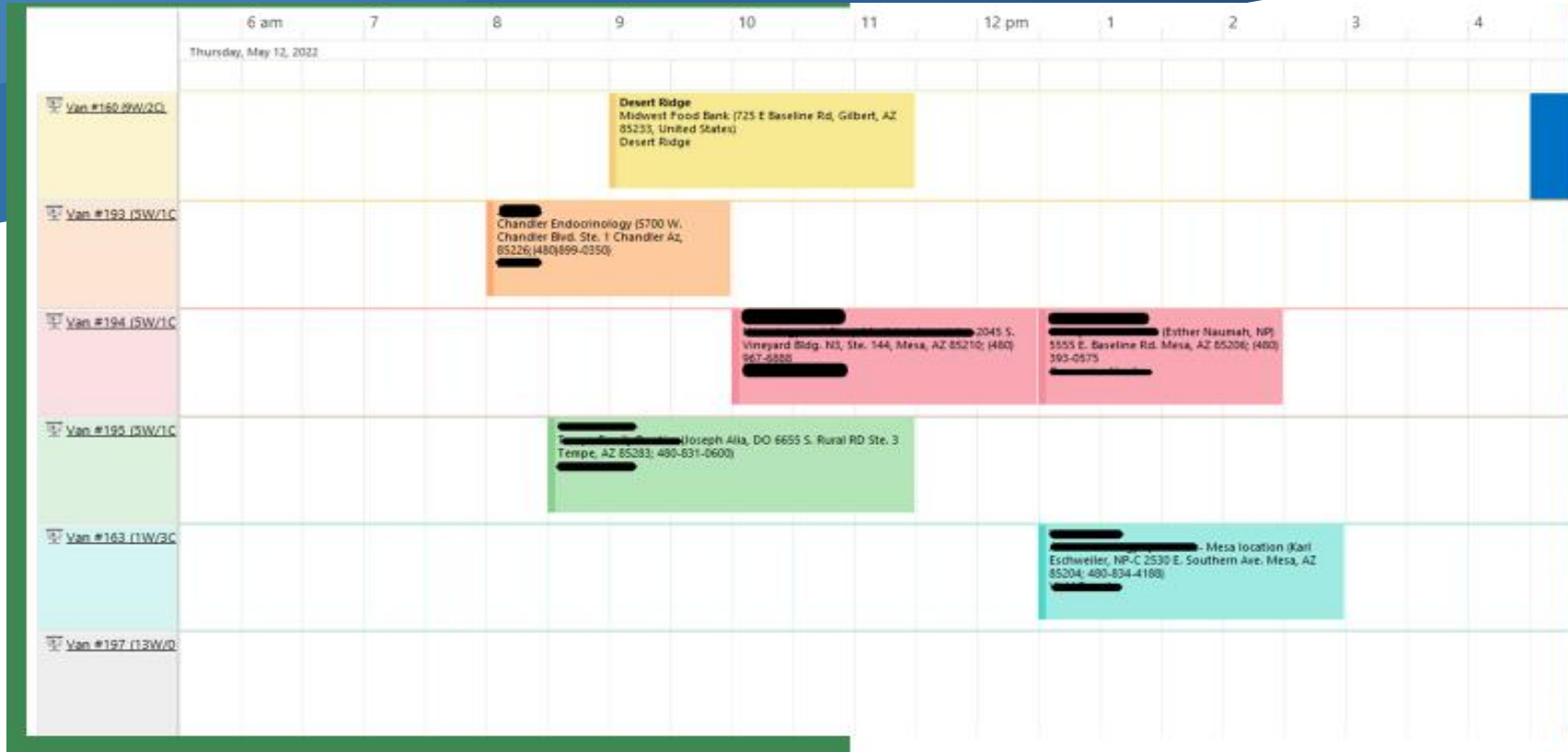


Outlook Calendar for scheduling/dispatching

- Scheduling and dispatching are very important steps of running a transportation program and dedicated software for these purposes can be costly to acquire and maintain. Also teaching staff how to use these tools takes time
- Most businesses already use Outlook, so it is just taking further advantage of something you may already have in place



One Example



- Create a digital identity on Outlook for each van, and schedule them like “meetings” In most cases, scheduling in 15-minute intervals is an option



- We schedule and dispatch vehicles based on activity, number of participants (wheelchairs and/or ambulatory), travel distance and more. This allows us to utilize our fleet in a more efficient, cost-effective manner.

Vehicle Reservation Board

- A reservation board identifies the vehicle number, number of ambulatory and wheelchair spaces, and who the vehicle is reserved for.
- Our team can check the board to quickly see which vehicles are available in case one goes out of service unexpectedly or if an unplanned trip arises. It's a helpful visual tool for identifying available vehicles.

WEDNESDAY APRIL

VAN #	Ambulatory Wheelchairs	RESERVATION	VAN #	Ambulatory Wheelchairs	
144	/1	COUNTRY CLUB	169	*	Del
151	/2	Standage	170	*	47
152	2/0	EDC-Shred	180	6/1	11/3
Admin 154	4/0		181	6/1	TUES 4
155	/2	EDC-D&B/14/12/18 exc. ASU	182	4/4	Willow
156	/2		184	/2	7/23 G
159	/2	Body Shop Accident McArthur 11/25/22	190	14/4	McAr
160	4/2	CARMEN	191	11/0	

Any Questions?

Thank you for joining us!

Dan Smoller, TCH

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