



FIRST YEAR IN REVIEW OCTOBER 17, 2018



IT TAKES A LOT OF EFFORT AND PEOPLE TO MAKE A RAIL TRANSIT AGENCY SUCCESSFUL

- SMART Riders. Who are they and what is their travel pattern?
- SMART tools available for our riders
- First & Last Mile options
- Finance, Grants and what is ahead
- Are we done building yet?
- Staffing

▪ **OPERATION**

- » Signal system, positive train control
- » Train engineers, conductors, field supervisors and train control center
- » Vehicle Maintenance
- » Signal, Tracks and Facility Maintenance
- » Operations support

Community Outreach and Marketing

Homework Assignment (ALL)

Public Comment

SMART RIDERS



ONE YEAR LATER

- **Who are SMART riders?**
- **At a high level, what are their travel patterns?**

THE FIRST YEAR OF SERVICE

- Total Ridership = Clipper Card counts (if they tag on/off) + Mobile App + 31-Day Passes + Eco Passes + Fare Dodgers
- From August 25, 2017 to August 25, 2018 we carried...
 - **722,961** Passengers
 - **65,468** Bicycles
 - **3,095** Wheelchairs

WHAT DO OUR RIDERS SAY

Three onboard surveys were conducted:

- Survey One: August 2017 to February 2018: 2,391 Wi-Fi respondents
- Survey Two: February 2018 to Current: 2,657 Wi-Fi respondents
- Survey Three: Spring 2018: Metropolitan Transportation Commission (MTC) conducted in person onboard survey, MTC collected 330 weekday and 80 weekend surveys, for a total of 410 completed surveys

EXECUTIVE SUMMARY

- 38% have a household size of two and 28% have a household size of four
- 77% are White/Caucasian and 15% are Hispanic
- 53% are male and 47% are female
- 95% speak English and 4% speak Spanish
- The average SMART train rider is 46 years old, makes \$97,300 annually, and lives in a household of three people, two of whom work.
- SMART riders are choice riders, in that they have access to a vehicle but use the SMART train instead. Respondents averaged 2 vehicles per household.

EXECUTIVE SUMMARY

Most SMART riders who also use transit, walk for at least a portion of their trip:

- Eight of every ten (83%) of these riders walked to their first transit stop
- Three-quarters (76%) of these riders walked to their destination from their last transit stop

Slightly more than half of all respondents (55%) paid their fare using the cash option on their Clipper and 31% used a Clipper 31 Day Pass.

One-fourth (27%) of riders use the SMART train five or more days per week. Over half (57%) ride the SMART train at least once a week.

EXECUTIVE SUMMARY

The most popular boarding stations were:

- San Rafael (29%),
- Petaluma Downtown (15%),
- Sonoma County Airport (11%).

The most popular alighting stations were:

- San Rafael (26%),
- Petaluma Downtown (15%),
- Santa Rosa Downtown (13%).

Nearly half (40%) of riders say they will use two or more transit vehicles (buses, trains, ferries) on their one-way trip. This is most commonly another Golden Gate Transit bus, Golden Gate Ferry, a Marin Transit bus, or BART.

Nearly half (46%) of our riders travel in 3 Zones, 25% travel in 2 Zones, 17% travel in 4 Zones & 6% travel in 5 Zones

AT WHICH STATION DID YOU GET ON THIS TRAIN?

| | WEEKDAY TOTAL | WEEKEND TOTAL |
|-----------------------|------------------|------------------|
| San Rafael | 29% | 35% |
| Petaluma Downtown | 15% | 15% |
| Sonoma County Airport | 11% | 16% |
| Santa Rosa Downtown | 11% | 11% |
| Cotati | 8% | 1% |
| Santa Rosa North | 7% | 7% |
| Marin Civic Center | 6% | 4% |
| Novato San Marin | 4% | 3% |
| Novato Hamilton | 4% | 6% |
| Rohnert Park | 3% | 1% |

AT WHICH STATION DID YOU GET OFF THIS TRAIN?

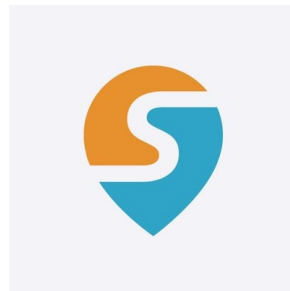
| | WEEKDAY TOTAL | WEEKEND TOTAL |
|-----------------------|------------------|------------------|
| San Rafael | 26% | 28% |
| Petaluma Downtown | 15% | 18% |
| Santa Rosa Downtown | 13% | 18% |
| Sonoma County Airport | 12% | 17% |
| Cotati | 8% | 6% |
| Rohnert Park | 8% | 5% |
| Santa Rosa North | 6% | 4% |
| Marin Civic Center | 6% | 5% |
| Novato Hamilton | 3% | |
| Novato San Marin | 3% | |

SMART TECH TOOLS

SMART APPS

There are a number of Apps available via a smartphone to our riders:

- SMART Electronic Ticket App
- The Transit App
- Swiftly
- Google Maps
- Park Mobile



SMART ELECTRONIC TICKET APP

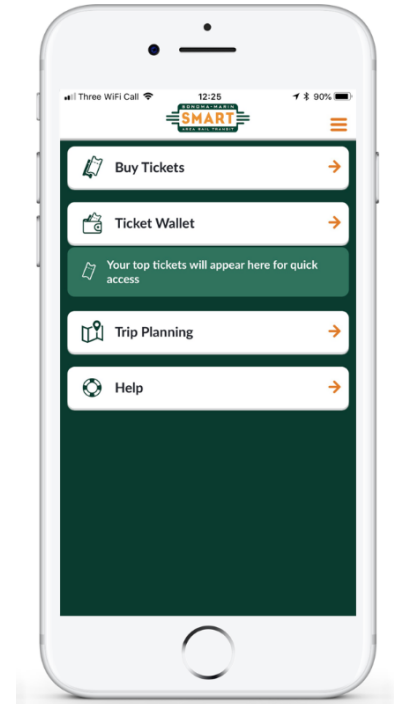


SMART eTickets 4+
Sonoma-Marín Area Rail Transit
Free

Free downloads in both the Google Play (Android Phone) and Apple App Store (iPhones). Click the search bar and type in “SMART eTickets”

Allows users to:

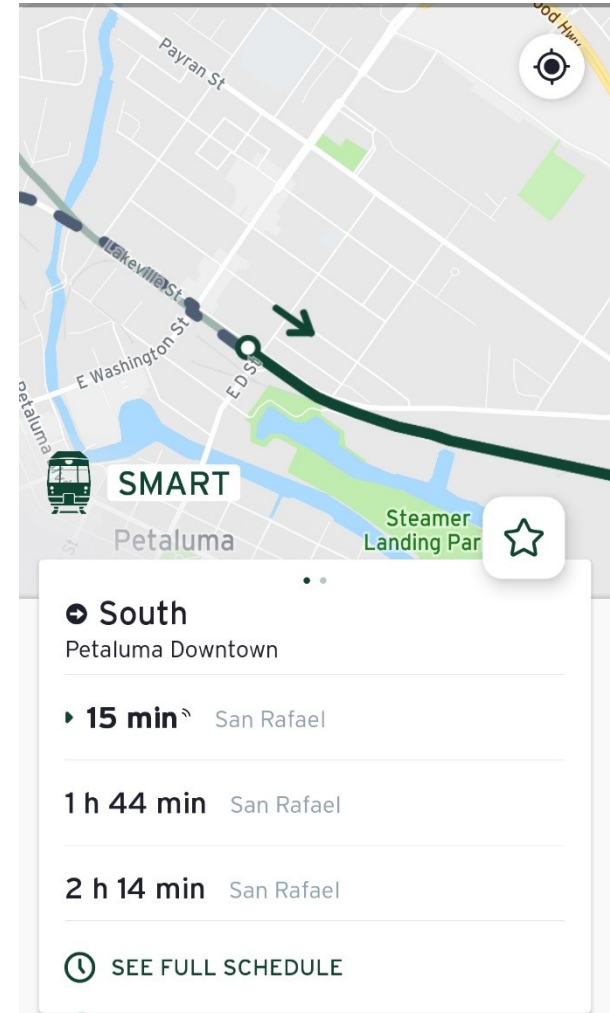
- Purchase one-way or round trip tickets
- Purchase multiple tickets on a single device/transaction
- Purchase discounted tickets (Senior, Youth, and Disabled)
- Check the SMART Train Schedule
- Connect directly to the Transit App



THE TRANSIT APP



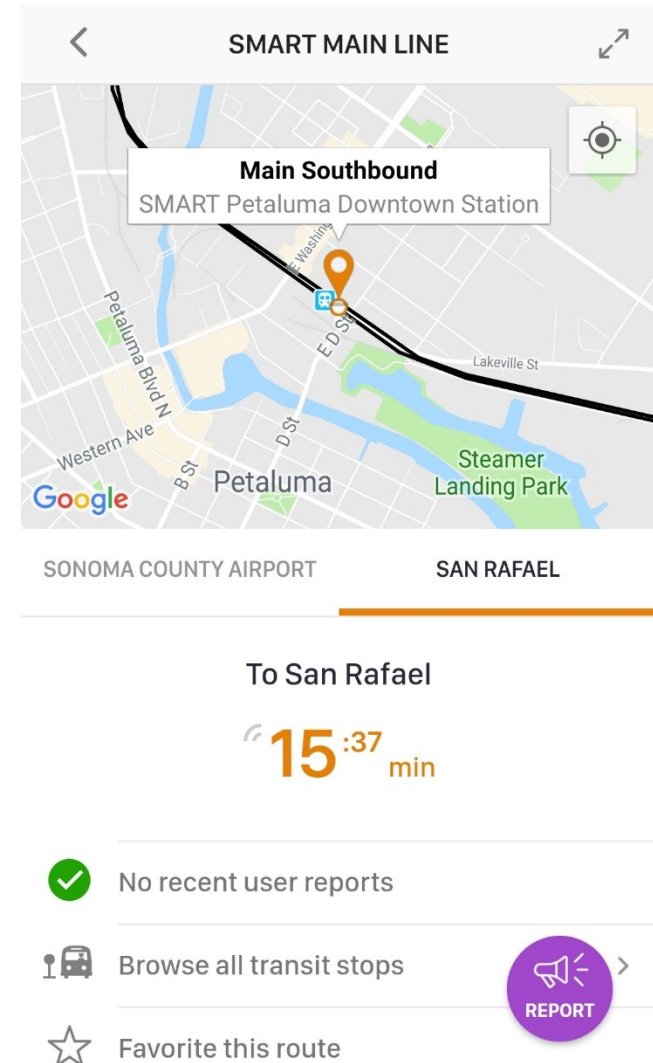
- Mobile application designed for aggregating and mapping real-time public transit data, functional in over 125 metropolitan areas around the world
- “Trip Planning” button in the SMART eTicket app directs users to this app
- Gives users upcoming departure times for nearby transit lines



SWIFTLY



- Provides riders with real-time information. Features include:
 - Accurate real-time transit information
 - Live crowdsourced alerts from fellow riders
 - For example: If a train is delayed or one of the cars is full, users can report that
 - Multi-modal trip planning
 - Live maps with vehicle locations



GOOGLE MAPS



- Google Maps vision is to assist people as they explore the world, no matter where they are
- Google Maps provides route planning for traveling by foot, car, bicycle, public transportation, or a combination of those
- All of our SMART stations and train routes display on Google Maps
- Google is looking to push service alerts and delay information in real-time to users of Google Maps on their app

← from Railroad Square Historic District, 9 4th St, Santa Rosa, CA 95401 to San Rafael Transit Center, San Rafael, CA 94901

5:31 PM - 6:26 PM (55 min) 📄 ↻ 🖨

🚍 SMART

5:31 PM from Santa Rosa Downtown
\$9.50 🚶 2 min every 30 min

☰ SCHEDULE EXPLORER

5:31 PM ○ Railroad Square Historic District
9 4th St, Santa Rosa, CA 95401

🚶 Go to Santa Rosa Downtown
About 1 min, 125 ft

5:31 PM ○ Santa Rosa Downtown

🚍 SMART 14 San Rafael
▼ 55 min (7 stops) - Stop ID: 7111

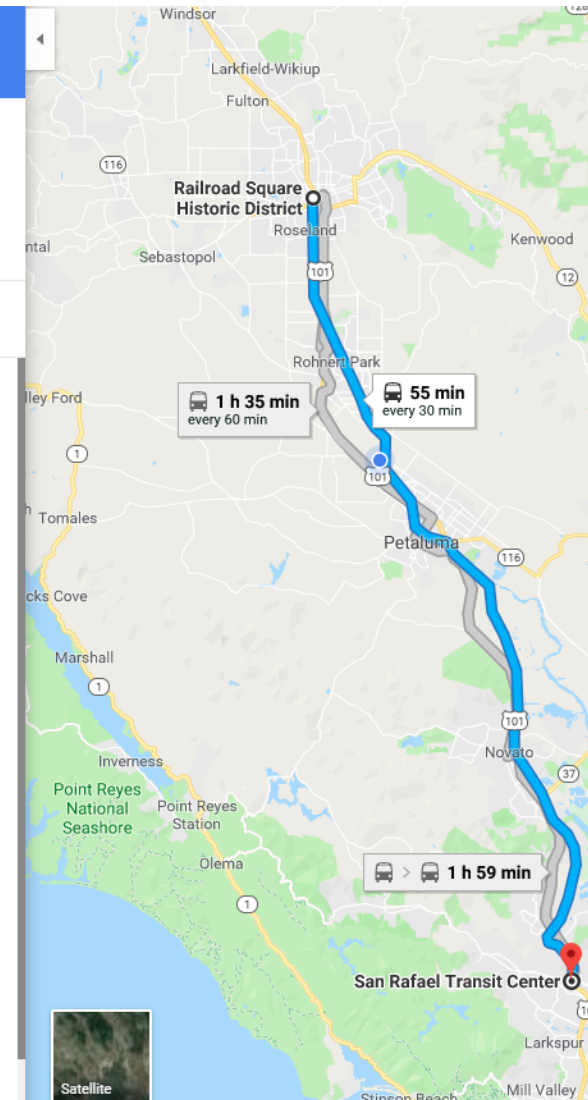
6:26 PM ○ San Rafael

🚶 Walk
▼ About 1 min, 164 ft

6:26 PM ○ San Rafael Transit Center
San Rafael, CA 94901

Cost: \$9.50

Tickets and information
Sonoma Marin Area Rail Transit - 1 (707) 794-3330

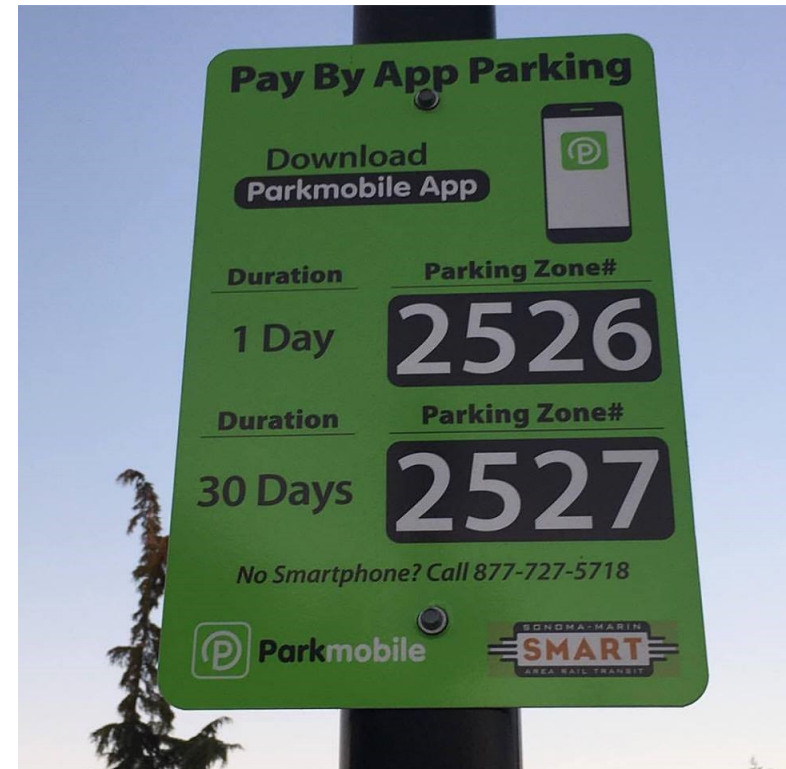


PARK MOBILE



Allows users to pay for parking at select SMART station lots

- Sonoma County Airport
- Rohnert Park
- Petaluma Downtown
- Novato San Marin
- Novato Hamilton



NIXLE

- Way for SMART to send alerts to SMART Nixle subscribers
- Messaging on delays, bus bridges, special schedules

Still need to subscribe?

TEXT:

SMART to 888777

FIRST AND LAST MILE CONNECTION

HOW DID YOU GET FROM YOUR STARTING POINT TO THE SMART STATION WHERE YOU BOARDED THIS TRAIN?

| | WEEKDAY TOTAL | WEEKEND TOTAL |
|---|------------------|------------------|
| Walked (Including skateboard, scooter, wheelchair) | 38% | 42% |
| Dropped off by someone (NOT a service) | 20% | 23% |
| Drove alone and parked | 16% | 8% |
| Bike | 14% | 9% |
| Bus, ferry, or other public transit | 11% | 4% |
| Drove or rode with others and parked | 9% | 14% |
| Dropped off by Uber, Lyft or a similar service | 4% | 6% |

Metropolitan Transportation Commission Onboard Survey – Spring 2018

HOW WILL YOU GET FROM THE SMART STATION WHERE YOU GET OFF THIS TRAIN TO YOUR FINAL DESTINATION?

| | WEEKDAY TOTAL | WEEKEND TOTAL |
|---|------------------|------------------|
| Walked (Including skateboard, scooter, wheelchair) | 38% | 28% |
| Drove alone and parked | 17% | 5% |
| Dropped off by someone (NOT a service) | 16% | 18% |
| Bike | 14% | 13% |
| Bus, ferry, or other public transit | 11% | 6% |
| Drove or rode with others and parked | 9% | 25% |
| Dropped off by Uber, Lyft or a similar service | 7% | 14% |

Metropolitan Transportation Commission Onboard Survey – Spring 2018

WHICH CONNECTING TRANSIT SYSTEMS ARE SMART RIDERS USING?

| | WEEKDAY TOTAL | WEEKEND TOTAL |
|-----------------------------------|------------------|------------------|
| Golden Gate Transit | 66% | 88% |
| Golden Gate Ferry | 23% | 25% |
| Marin Transit | 19% | |
| BART | 12% | 25% |
| Santa Rosa CityBus | 10% | 13% |
| San Francisco Muni | 8% | 13% |
| Sonoma County Transit | 7% | - |
| Petaluma Transit | 3% | - |
| AC Transit | 3% | - |
| FAST (Fairfield - Suisun Transit) | 1% | - |
| Amtrak | 1% | - |
| Emery Go Round | 1% | - |

NOTES: Estimated 11% of Weekday and 4-6% of Weekend SMART Riders use Public Transit for First/Last Mile. Connections can include multiple agencies.

FIRST AND LAST MILE CONNECTION

How have SMART and Partner Agencies been supporting SMART riders?

FIRST AND LAST MILE CONNECTION

- **Public Transit Partnerships**
- **Other Public Agency Support Programs**
 - Emergency Ride Home
 - Rideshare
 - Car Share
 - Bike Share
- **SMART Access Programs**
 - Bicycle Parking

SMART - PUBLIC TRANSIT PARTNERSHIPS

- GGT Route 31 – Larkspur Ferry
- SCT Route 56 – North County Connector
- SCT Route 55 – Airport Business Park Shuttle
- Santa Rosa ParkSMART Shuttle
- Santa Rosa CityBus service modifications
- Petaluma Transit Route 11/Route 24 modifications

All operators provide Transfer Credits for Clipper card users

SMART - PUBLIC TRANSIT PARTNERSHIPS

- Bus Bridge Emergency Service (GGT/SCT)
- Customer Service Support (GGT Contract)
- Clipper card sales (Senior/Youth)
 - Transit Partners volume higher than before SMART
- SMART-specific web information via other operators
- Joint social media messaging
- Mutual cross-promotion at Outreach Events

OTHER PUBLIC AGENCY SUPPORT PROGRAMS: EMERGENCY RIDE HOME

Commuters using alternative transportation are eligible to be reimbursed for an emergency ride home:

- Emergency examples - sick child, bicycle flat tire, SMART train not operating on schedule, etc.
- Can use taxi, rideshare (Lyft/Uber), car share, or rental car.
- Can use for up to 4 rides home per year, up to \$125 each.
- Based on employment location –
 - Marin work site – submit to **Transportation Authority of Marin**
 - <https://www.tam.ca.gov/erh/>
 - Sonoma work site – submit to **Sonoma County Transportation Authority**
 - <http://scta.ca.gov/projects/emergency-ride/>

OTHER PUBLIC AGENCY SUPPORT PROGRAMS: RIDESHARE SERVICES



TAM's GETSMART Lyft Program

Update: September 2018



Making the Most out of Marin Transportation Dollars

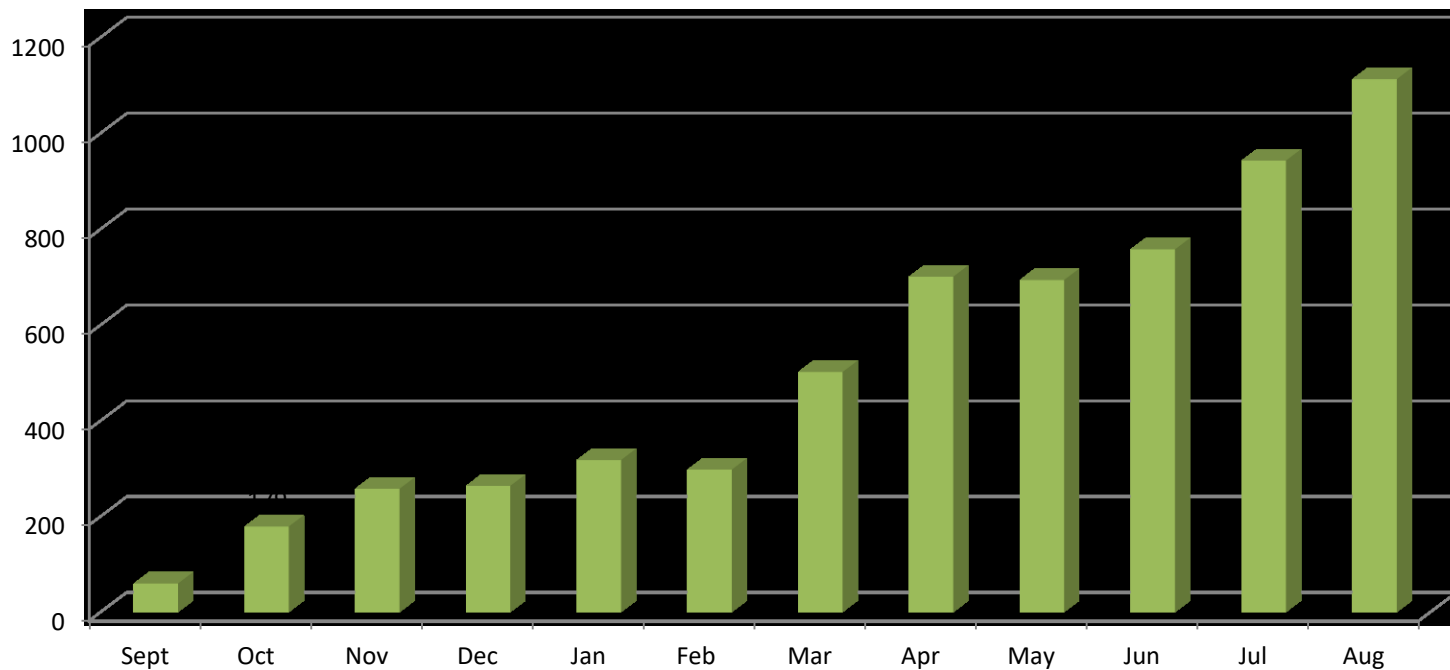


TAM'S LYFT PROGRAM - OVERVIEW

- Launched September 12, 2017
- \$5 off Shared Rides to and from SMART Stations
- Complimentary Whistlestop ADA services
- Funded using Measure B \$10 Vehicle Registration Fee

TAM'S LYFT PROGRAM - RIDERSHIP

- August 2018 - 1,100 rides a month/48 rides a day
- 1-year total – Over 6,000 Rides



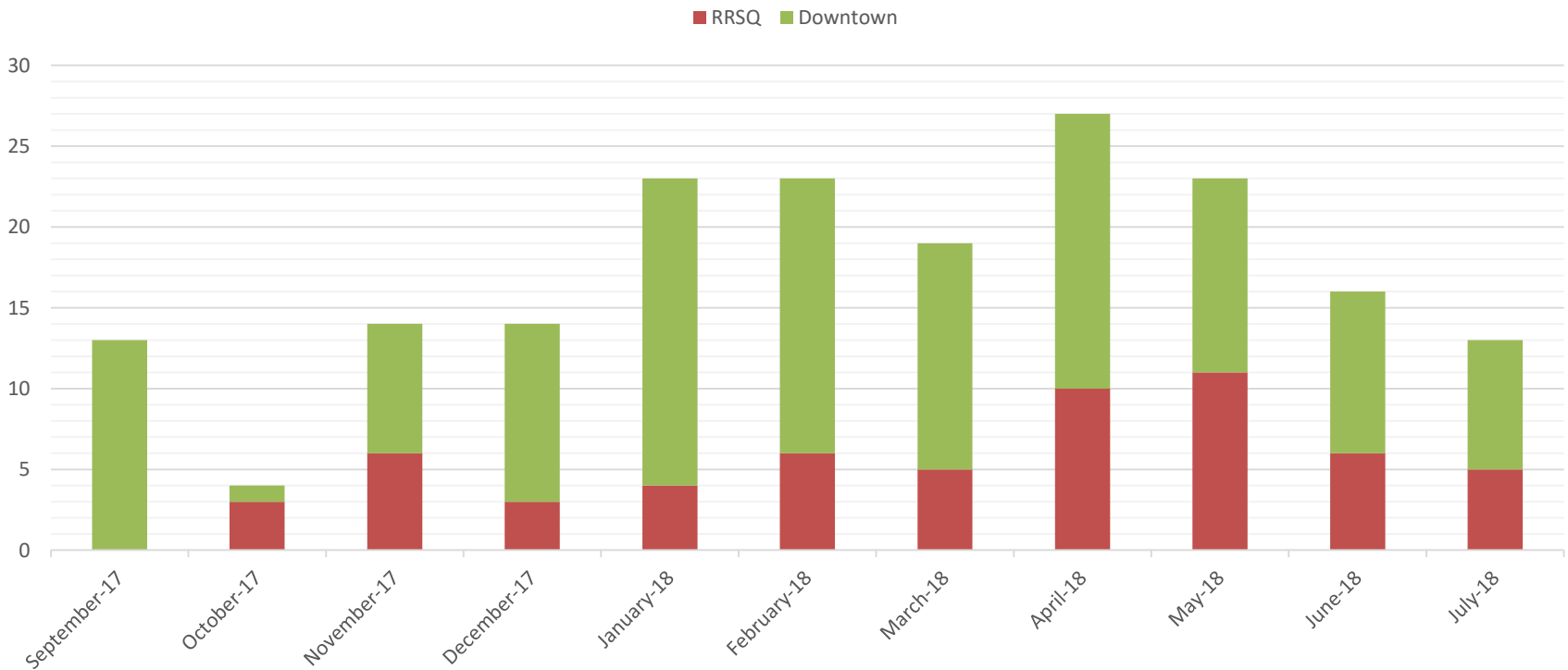
OTHER PUBLIC AGENCY SUPPORT PROGRAMS: CAR SHARE

- ZipCar service launched by Sonoma County Transportation Authority and City of Santa Rosa the same day as SMART
- Two “pods”
- First year small but growing usage
 - Average of 18 reservations per month
 - SMART Santa Rosa Downtown Station: 6
 - Santa Rosa Downtown, 730 5th Street Parking Lot: 12
- Users reserve cars for longer periods than in rest of Bay Area
- Usage higher in inclement weather months



OTHER PUBLIC AGENCY SUPPORT PROGRAMS: CAR SHARE

Santa Rosa ZipCar Monthly Reservations By Location



OTHER PUBLIC AGENCY SUPPORT PROGRAMS: BIKE SHARE

TAM and SCTA partnering on a Pilot Bike Share program funded by the Metropolitan Transportation Commission

- ***SMART Access Bike Share Pilot Program***

OTHER PUBLIC AGENCY SUPPORT PROGRAMS: BIKE SHARE

- Project Managers TAM & SCTA
- Focus
 - SMART Phase 1 stations
 - Key destinations
- 160+ bicycles
- Partners – Local Cities and SMART
- Vendor selection underway
- Public outreach on siting after vendor selection



SMART PROGRAMS

BICYCLE PARKING AT SMART STATIONS

SMART installed 100 bicycle racks and 34 electronic lockers accommodating 68 bicycles at SMART Stations

| Station | Racks | eLockers |
|-----------------------|-------|----------|
| San Rafael Downtown | 10 | 4 |
| Marin Civic Center | 10 | 4 |
| Novato Hamilton | 10 | 4 |
| Novato San Marin | 10 | 8 |
| Petaluma Downtown | 10 | 12 |
| Cotati | 10 | 8 |
| Rohnert Park | 10 | 8 |
| Santa Rosa Downtown | 10 | 12 |
| Santa Rosa North | 10 | 4 |
| Sonoma County Airport | 10 | 4 |

SMART PROGRAMS

BIKE LINK ELECTRONIC BIKE LOCKERS

Where are the most hours of rentals occurring?

- #1: Santa Rosa Downtown, 12 spaces - 14,273
- #2: Novato Hamilton, 4 spaces - 13,735
- #3: Marin County Civic Center, 4 spaces - 6,052

FIRST AND LAST MILE CONNECTION

ONGOING EFFORTS:

- Continue marketing partner agency programs and transit options
- Monitor Bike Link locker usage and return to board as needed with recommendations for program modification
- Participate in TAM-SCTA SMART Access Bike Share Pilot Program

FINANCE

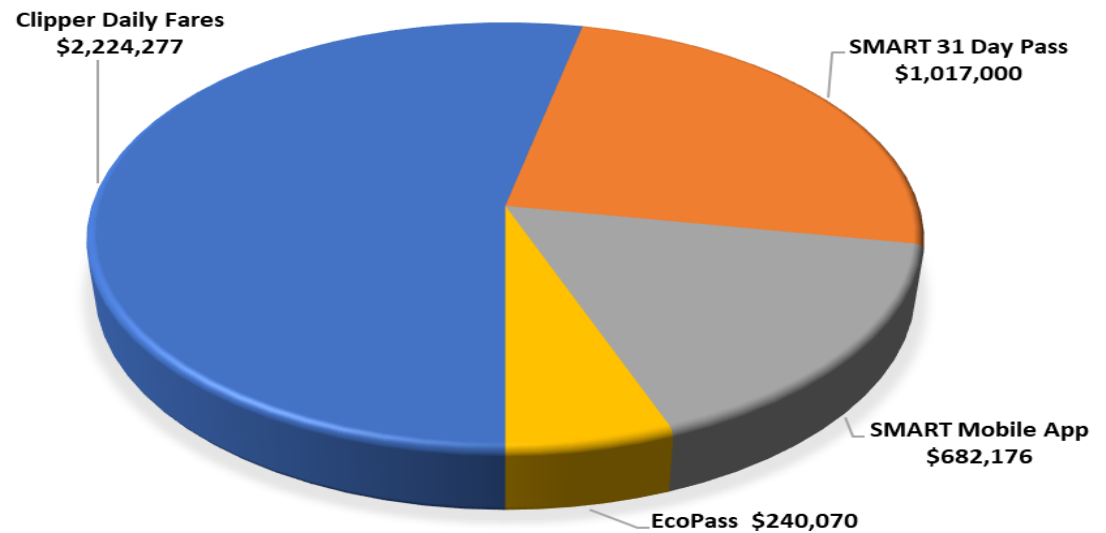
REVENUE SUMMARY

- SMART has successfully implemented three different programs: Clipper sales and validation on platform, development of the Mobile app, and employer Eco Pass.
- Petaluma office sells regular and discount Clipper cards, and has become an application site for the Regional Transit Connection (RTC) Clipper Card for disabled riders
- SMART Board approved fare policy with goal of \$3.9 million in fares annually.
 - From August 2017 through the end of August 2018, SMART passengers have paid \$4.16 million in fares

FARE REVENUE SUMMARY

More than half of SMART fare revenue comes from Clipper single fare riders, followed by 31-day pass holders (through Clipper with a smaller number of mobile app and Eco Pass riders.

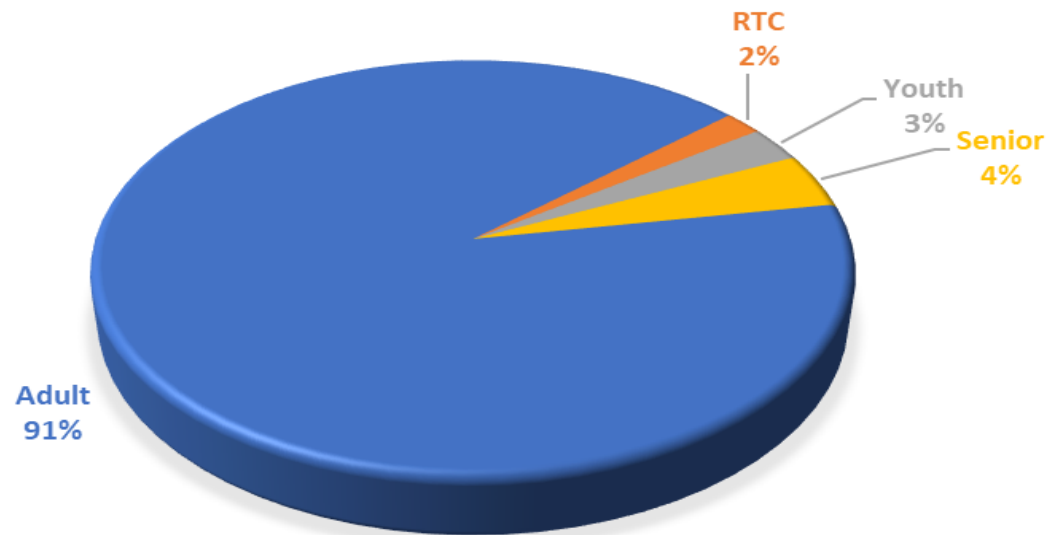
SMART FARE REVENUE BY TYPE



REVENUE SUMMARY

- Total of 5,910 31-day passes sold Aug 2017-Aug. 2018
 - Average of 455 per month
- Total 1,410 Eco Passes, average of 118 per month

31-DAY PASS HOLDERS



GRANT FUNDING SUPPORTING SMART

All Grant Funds Programmed to Date = \$301,518,185

- Of that, Grant Funds since start of service = \$79,967,536
 - \$18,967,536 supporting Operations department (\$14m of that is SB1 funded)
 - \$61,000,000 supporting System Expansion (\$21m of that is SB1 funded)

Pending Grant Applications:

- \$34,280,000 Pathway Grants (All \$34m is SB1 funded)
- \$22,400,000 Passenger and Freight Rail Grants

ARE WE DONE BUILDING YET?

CAPITAL PROJECTS

PASSENGER RAIL EXTENSIONS

- Larkspur Extension
- Windsor Extension
- Novato – Suisun City Study
- Downtown Novato Station
- Pathways



LARKSPUR EXTENSION

Upcoming Activities:

- Bridges (Q4 2018)
- Roadway Construction (Q4 2018)
- Track Construction (Q1/Q2 2019)
- Signaling Installations (Q4 2018 – Q3 2019)
- Testing: (Q3 2019 – Q4 2019)



LARKSPUR EXTENSION



Andersen to Rice Pathway Construction (For the City of San Rafael)

WINDSOR EXTENSION

Schedule:

- Board of Directors Awarded Systems Contract: 10/04/18
- Preliminary Design: 2018
- Design and Permitting: 2019
- Construction: 2020
 - Including a paved parking lot
 - Including Multi Purpose Path connecting Airport station to Windsor station
- Testing and Commissioning: 2021



NOVATO – SUISUN CITY

Engineering Feasibility Study:

- Inventory Right-of-Way
- Evaluate the Natural Environment
- Identify Challenges and Opportunities
- Develop High-Level Cost Estimate
- Report: Spring 2019



NOVATO – SUISUN CITY



DOWNTOWN NOVATO STATION

Schedule:

- Design: Q4 2018 through Q2 2019
- Installation: Q3 2019
- Testing and Commissioning: Q4 2019



PATHWAY UPDATE

Pathway NEPA Clearance – Finished 36 miles of federal environmental review in early 2016

- Clears the way for us to apply for permits

2017-18 Construction: Total of 4.6 more miles at a cost of just under \$5.4M

- San Rafael: Marin Civic Center Station to North San Pedro Road
- Novato: Franklin Avenue to Grant Avenue
- Cotati/Rohnert Park: Cotati Station to Sonoma Mountain Village



PATHWAYS

Upcoming Construction 2019:

- Petaluma: Payran – Southpoint
(1.1 mile - \$1.6M)

Planning/Design:

- Coordinate with Town of Windsor
(Airport Station to Windsor Station)

Grant Funding – Applied For:

- Bellevue Avenue (Santa Rosa) to
Golf Course Drive (Rohnert Park)
(2.8 miles)
- Windsor to Petaluma Gap Closure
Project (11.8 miles)

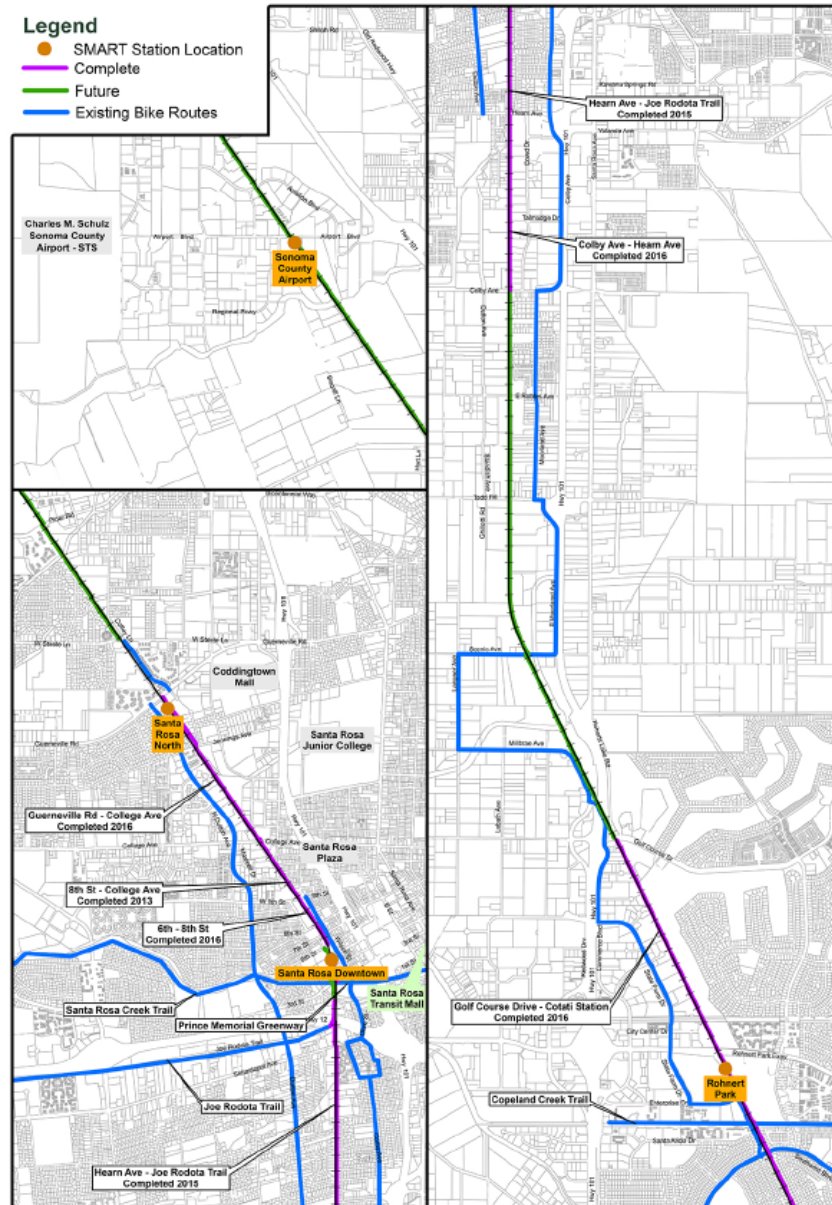


PATHWAYS



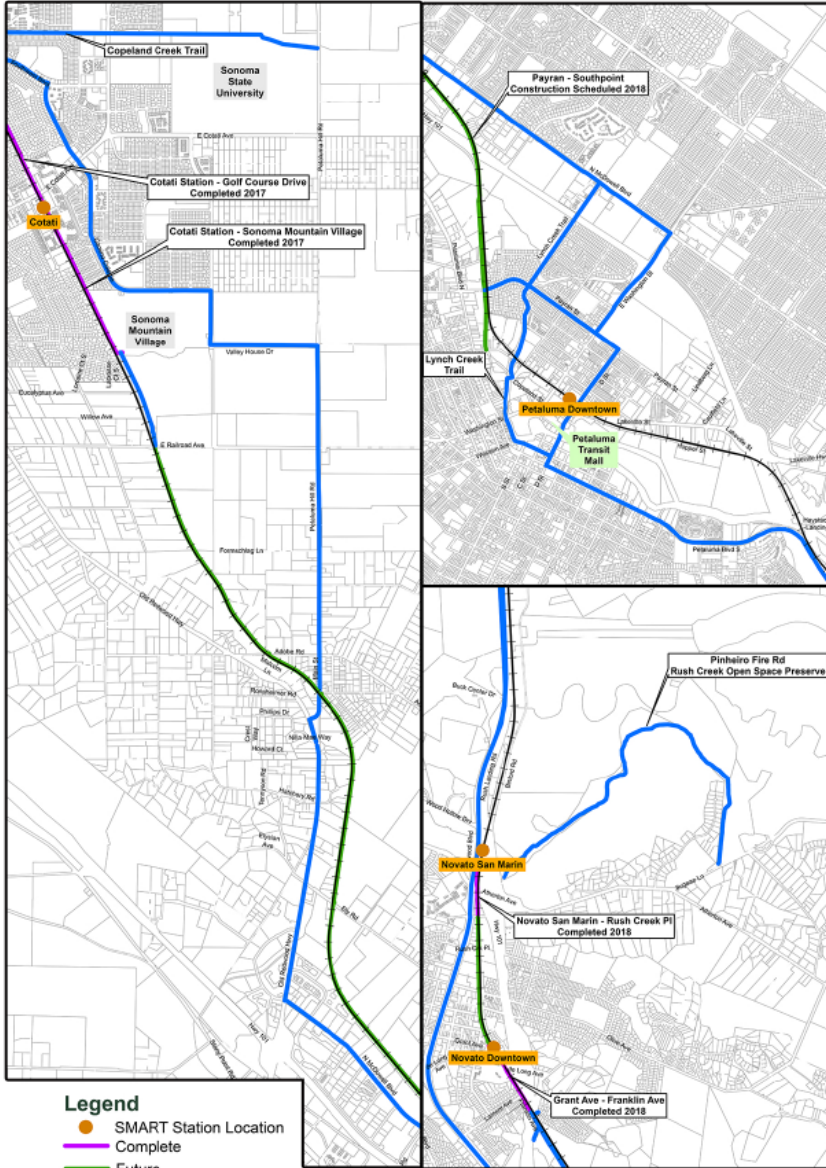
PATHWAY MAP: Santa Rosa to Rohnert Park

- Legend**
- SMART Station Location
 - Complete
 - Future
 - Existing Bike Routes



April 2018

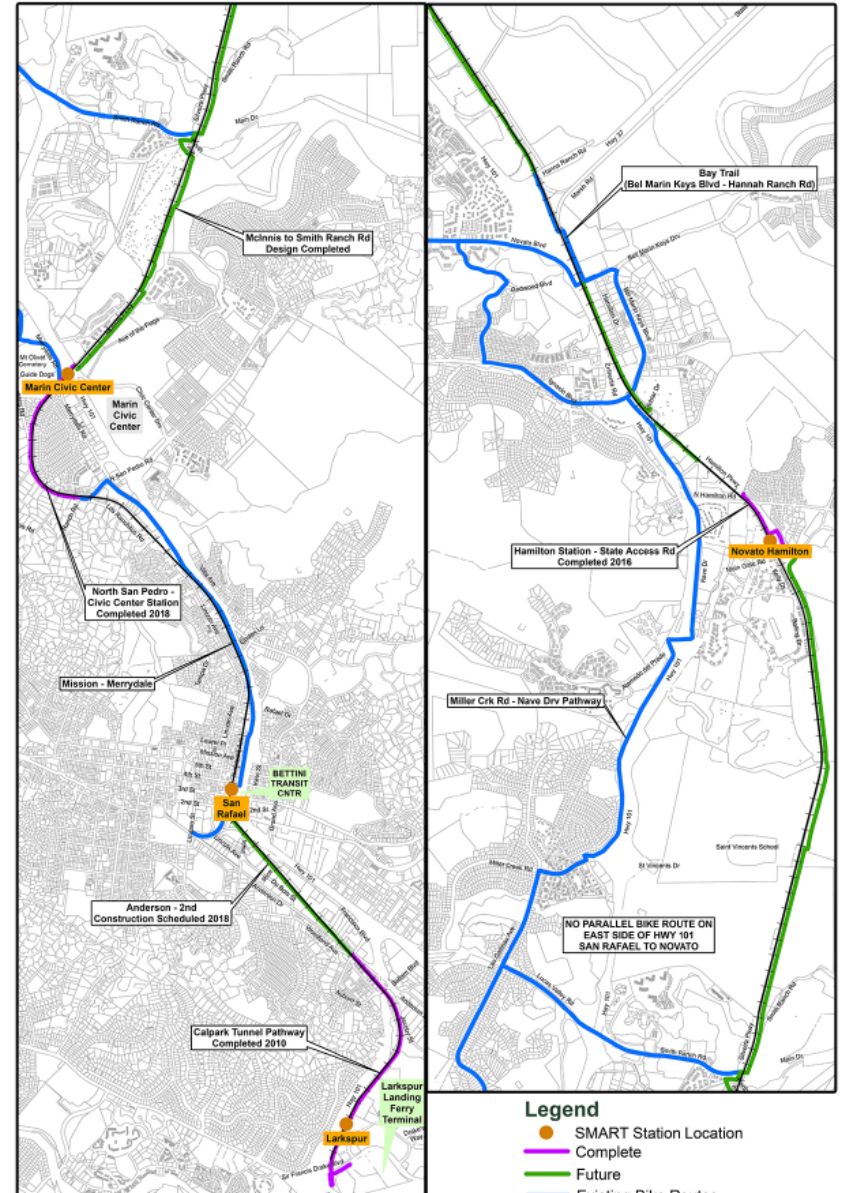




Legend

- SMART Station Location
- Complete
- Future
- Existing Bike Routes

April 2018



Legend

- SMART Station Location
- Complete
- Future
- Existing Bike Routes

April 2018

STAFFING NEEDS

OPERATIONS STAFFING NEEDS

Current Operations Vacancies

| Job Class | Percentage Vacant |
|--------------------------------|-------------------|
| Engineer-Conductor | 28% |
| Controller-Supervisor | 3% |
| Vehicle Maintenance Technician | 7% |
| Signal Technician | 7% |
| Laborer | 10% |
| Facilities Technician | 3% |

OPERATIONS - TURNOVER BY FISCAL YEAR

| FISCAL YEAR | AVERAGE ANNUAL OPERATIONS EMPLOYEES | NUMBER SEPARTATIONS | ANNUAL TURNOVER |
|-------------|-------------------------------------|---------------------|-----------------|
| FY 15/16 | 32.5 | 6 | 18% |
| FY 16/17 | 61.5 | 10 | 16% |
| FY 17/18 | 77.5 | 9 | 12% |

SEPARATION REASONS

WHY DID THEY CHOOSE TO LEAVE?

- Housing Cost and Family Needs/Expenses - 50%
- Returned to previous employer - 9%
- Career Advancement- 9%
- Medical – 6%
- Retirement – 3%

OPTIONS

- Workforce Housing or Rental Subsidies
- Grow Local Talent and Create Career Paths
 - Create “Apprentice” or “Assistant” Positions
 - Create Job Class Series – Improve Retention of Millennials
- Career Technical Education
 - Partnerships with Santa Rosa Junior College and College of Marin
 - Partner With Unions To Fund Career Technical Education
 - Career Technical Education Foundation – “Sonoma Corps” – Job Training Programs

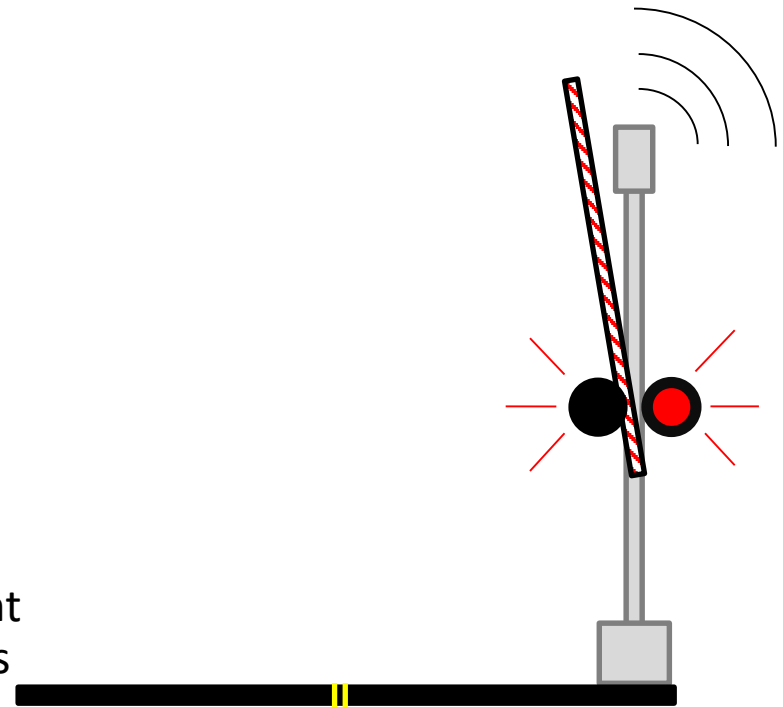
OPERATIONS

GRADE CROSSING OVERVIEW

SMART – GRADE CROSSING OPERATION OVERVIEW

▪ Crossing Operation Basics

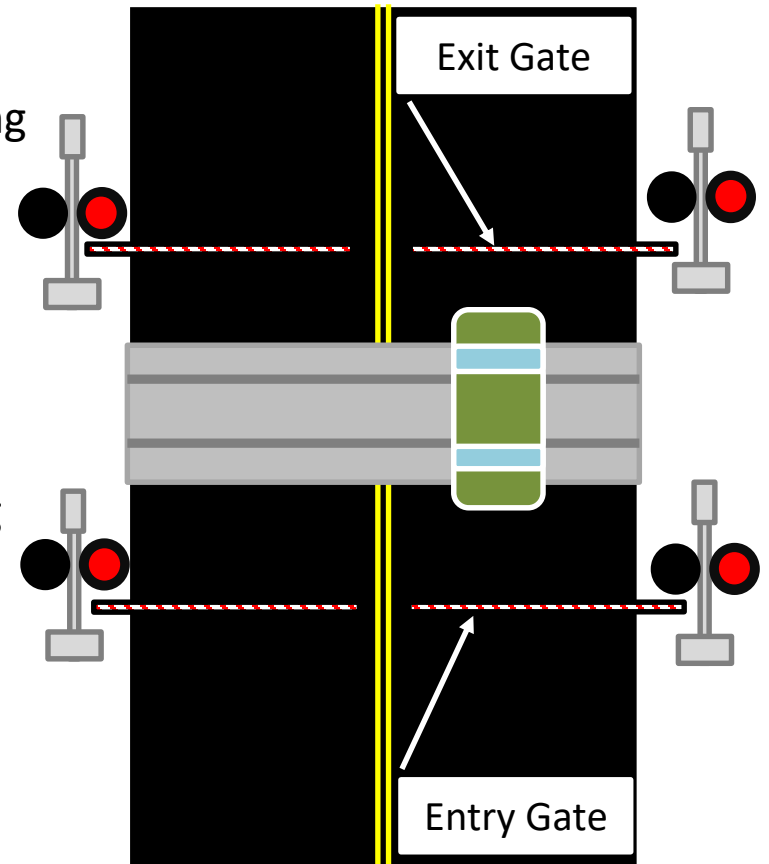
- Designed to provide a minimum of 25 seconds warning time
- Design warning time can be greater dependent on crossing width, roadway geometry
- Warning time is measured from:
 - Lights flashing and bells ringing
 - To train reaching crossing
- Federal Regulations Require a Minimum of 20 Seconds Warning Time
- Crossing gates are required to begin descent a minimum of three seconds after the lights and bells are activated
- Crossing gates are required to be horizontal 5 seconds prior to train reaching crossing
- Exit gates are required to be horizontal when the train reaches crossing



SMART – FOUR QUADRANT GATE CROSSINGS

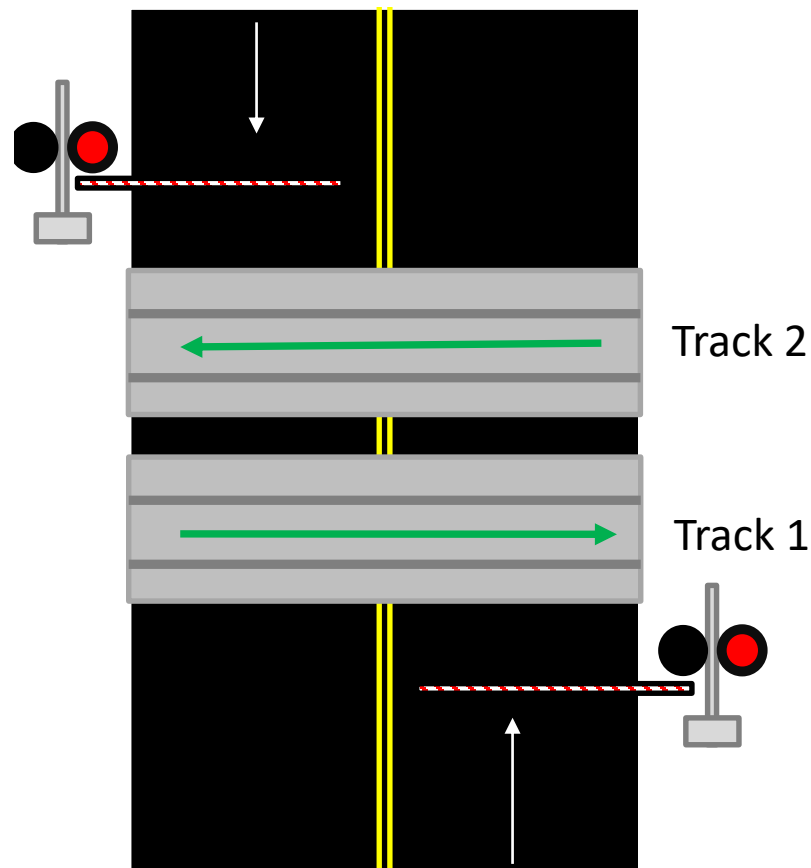
▪ Four Quadrant Gate Crossings

- Entry Gates Are Used to Block Entry to the crossing in the normal direction of traffic
- Exit Gates are used to block entry to the crossing in the opposing direction of traffic
- Exit gates descend after entry gates to allow vehicles to clear the crossing
- Exit gates do not descend if a car is detected in the crossing
- Exit gates rise if a car is detected in the crossing
- Exit gates rise first once the train is detected to be clear of crossing
- Once exit gates are vertical, entry gates will rise



SMART – DOUBLE TRACK CROSSINGS

- Designed to provide a minimum of 25 seconds of warning time for movements in both directions of travel on both tracks
- Double track crossings exist where two trains “meet”, or pass one another
- When the crossing is activated by a train on track 1, and another movement is detected on the track 2, the crossing will remain activated until both trains clear both tracks
- When the crossing is activated on track 1, and another movement is taking place on track 2, but the train is outside the detection limits, or moving too slowly to activate the crossing, the crossing will deactivate once the train clears track 1
- Once the movement is detected on track 2, the crossing will reactivate, and will deactivate once the train clears track 2



SMART – POSITIVE TRAIN CONTROL STATUS

- First railroad in nation to enter Revenue Service Demonstration with Enhanced Automatic Train Control (E-ATC)
- 7 other railroads working on implementing Enhanced Automatic Train Control
- SMART's Revenue Service Demonstration began on August 25, 2017
- Over 10,500 + end to end trips performed as of end of September 2018
- All Commuter trains operate under PTC enforcement
- System statistics submitted to Federal Railroad Administration
- To date, ZERO safety related anomalies have been detected
- SMART working with designer and supplier to increase system's efficiency



SMART – POSITIVE TRAIN CONTROL OVERVIEW

- **Positive Train Control Prevents:**

- Train-to-train collisions
- Derailments caused by overspeed
- Unauthorized train movement into Work Zones
- Movement of a train through a switch left in the wrong position

- **Positive Train Control does not prevent:**

- Collisions at Grade Crossings
- Collisions with Trespassers
- Track or Equipment Failures



SAFETY AND SECURITY

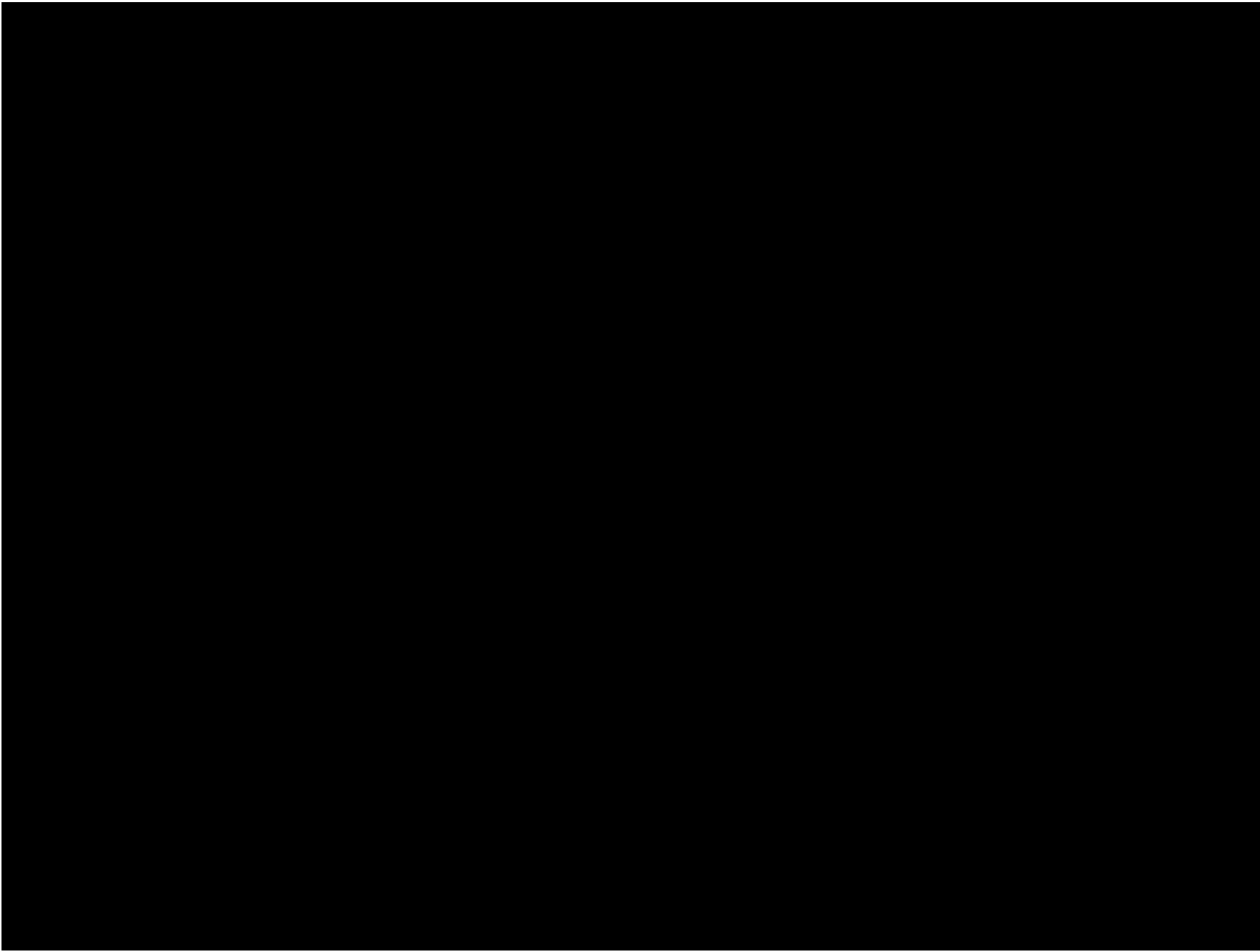
RIGHT-OF-WAY TRESPASSING ISSUES



CALLS FOR SERVICE

- 2.5 code compliance positions;
currently staffed with 1.5
- Public Safety has logged 240 incidents in last 12 months
 - » Camps
 - » Trespassing
 - » Probation arrests
 - » Warrant arrests
 - » Drugs/alcohol
- Assisting outside police agencies
 - » Drunk driving cases
 - » Fraud





OUTSIDE AGENCY COORDINATION

- Ongoing meetings with the following agencies
 - » Federal Bureau of Investigations
 - » Department of Homeland Security
 - » Northern California Regional Intelligence Center
 - » Sonoma County Sheriff, Santa Rosa Police Department, Sonoma County District Attorney's Office, Rohnert Park Dept. of Public Safety, Petaluma Police Department, Cotati Police Department, Windsor Police Department, Healdsburg Police Department, Cloverdale Police Department
 - » Marin County Sheriff, Marin County District Attorney's Office, Novato Police Department, San Rafael Police Department, Central Marin Police Department

ASSEMBLY BILL NO. 2034

- Address Human Trafficking
- Before 2021
- Agencies that operate rail, bus
- Provide training to staff
 - » How to recognize
 - » How to report
- Working with Marin Coalition to End Human Trafficking
- Training for existing staff and new hires going forward



PARKING

- Airport and Petaluma lots are often full
- Both Novato stations and Rohnert Park are under utilized
 - » San Marin station, vehicles park on street instead of lot
- User frustrations with Park Mobile
 - » Usually infrequent users trying to download app in lot and enter info
 - » Continue to encourage riders to plan ahead with parking app

BEHAVING BADLY



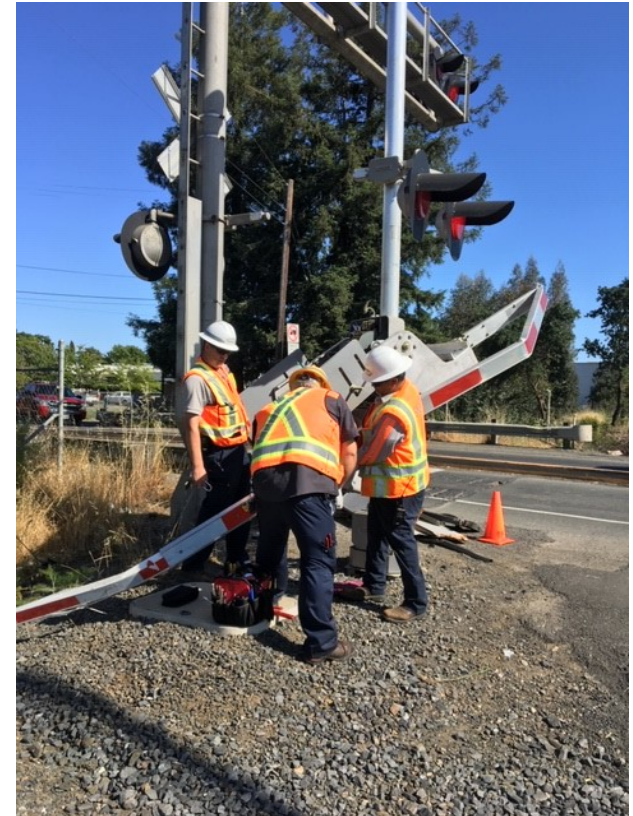
INCIDENT OVERVIEW

- Cyclist
 - » 10/19/17
 - » W. Steele Lane, Santa Rosa
 - » All safety equipment was functioning
 - » Cyclist went around lowered gates
 - » Cyclist wearing headphones
 - » Quiet Zone
- Suicide
 - » 1/31/18
 - » Hearn Ave, Santa Rosa
 - » Waited at the crossing for train to arrive
 - » All safety equipment was functioning
 - » Quiet Zone



INCIDENT OVERVIEW

- Box truck
 - » 5/31/18
 - » Todd Road, Santa Rosa
 - » Drove through lowered gate arms
 - » All safety equipment was functioning
 - » Quiet Zone



INCIDENT OVERVIEW

- Suicide
 - » 8/13/18
 - » State Access, Novato
 - » All safety equipment was functioning
 - » Waited on tracks for train
 - » Quiet Zone

- Pedestrian
 - » 8/30/18
 - » Golf Course Drive, Rohnert Park
 - » All safety equipment was functioning
 - » Pedestrian had headphones
 - » Quiet Zone

INCIDENT RESPONSE

- Train crew reports “Emergency” on train via radio
 - » Emergency brake
 - » Identify train number
 - » Identify location
 - » Identify incident/scene
- Control center notifications immediately to
 - » Police/Fire/EMS
 - » SMART staff for response
 - » Bus bridge activated if applicable

INCIDENT RESPONSE

- SMART staff response to the scene
 - » Chief of Police
 - Coordination with on-scene agencies
 - Provide updates from scene
 - » Operations Chief
 - coordinates all activities at the Rail Operation Center
 - » Superintendents of Maintenance and staff
 - » Field Personnel respond to the scene at a designated staging area and then authorized to proceed they perform the following functions:
 - » Train control and signal system integrity
 - » Track integrity
 - » Check the train (mechanical)

INCIDENT RESPONSE

- Assist in moving investigation along
 - » Engineer, conductor interviewed by law enforcement
 - » Provide guidance on investigation
 - » Safely remove passengers when appropriate and authorized by the scene commander from train
 - » Gather passenger information and collect courtesy cards
- Relief crew brought to scene
 - » On board crew taken to Operations Center for testing
 - » Train gets cleared by Vehicle team
- Law Enforcement clears area, completes investigation
 - » This has taken from 2 to 5 hours depending on case

AFTER INCIDENT

- Report to and coordinate with outside agencies as appropriate
 - » Federal Railroad Administration
 - » California Public Utilities Commission
 - » Federal Bureau of Investigations
 - » Transportation Security Administration
 - » National Transportation Database
 - » National Response Center
- All internal reports completed and submitted for review
- Work with the appropriate police agency, coroner (when appropriate) and District Attorney's office for case to be processed
- Conduct debriefing with SMART staff
- Conduct debriefing with outside agencies

LESSON LEARNED

- Bus Bridges continue to be an obstacle
 - » At the mercy of outside companies
 - » Depending on time of day, availability is limited
 - » Can take over an hour to get a bus to destination for pick up

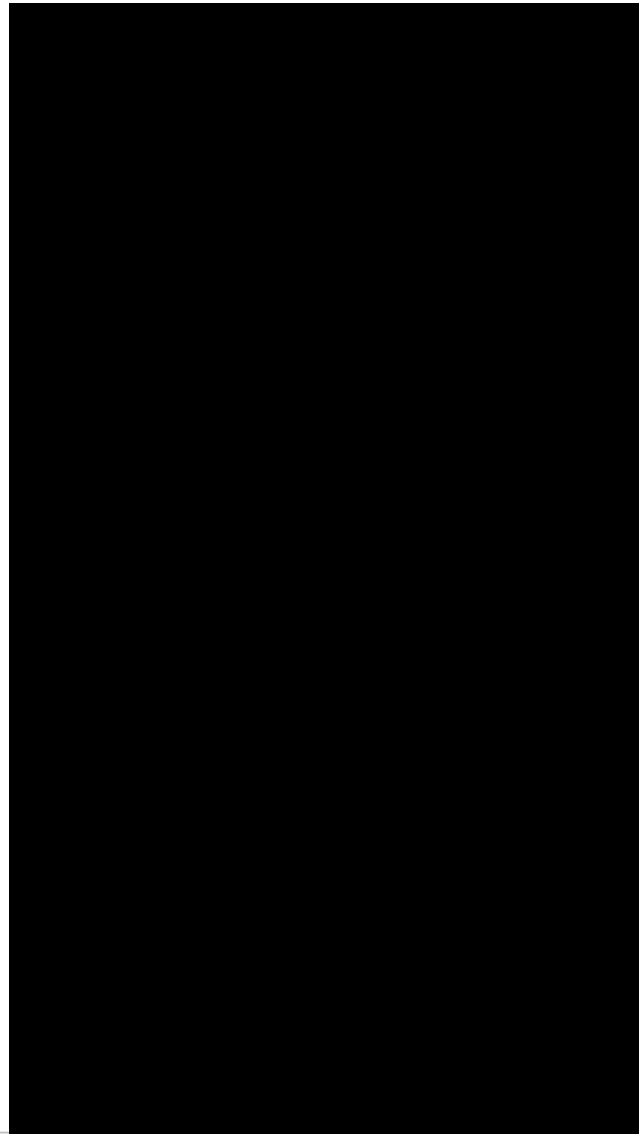


Hamilton Station bus bridge after 8/13 incident

LESSONS LEARNED

- Outside law enforcement agencies
 - » We have to wait for reports/determinations, can take weeks or months
 - » Each agency has their own interest for press notifications; SMART, Police, Coroner each have own priorities
- After the first Marin County incident
 - » SMART hosted a debriefings with Novato Police, San Rafael Police, Central Marin Police and Marin County Coroner
 - » We discussed best practices for conducting train incident investigations

MESSAGING TO PUBLIC ON PLATFORMS



REGARDLESS OF THE CAUSE

- Other agencies lessons learned
 - » Ongoing training has helped with smooth response and investigation



REGARDLESS OF THE CAUSE

- Other agencies lessons learned
 - » Cooperation with SMART
 - » Coordinated media responses
 - » Communication with staff early and often allows for a more thorough investigation



PEDESTRIAN SAFETY ENHANCEMENTS

- General Manager forms rapid task force after EACH incident
 - » Public safety
 - » Engineering
 - » Systems Engineer
 - » Operations
 - » Our assignment is to review each incident to determine if SMART could enhance safety to prevent similar incidents.
 - » Conducted site visits at every crossing
- Every crossing meets ALL regulatory requirements, 62 crossings were evaluated for additional enhancements
- All regulatory measures were taken and all warning devices were properly functioning, the gates were down, lights were flashing. The person involved was inattentive, was wearing headphones and was in a Quiet Zone.

SUMMARY OF 62 CROSSINGS

12 with existing pedestrian gates



Ignacio, Novato

SUMMARY OF 62 CROSSINGS

20 with NO pedestrian route



Scenic Ave, Santa Rosa



Barham Ave, Santa Rosa

SUMMARY OF 62 CROSSINGS

13 crossings within SMART's Right of Way WITH pedestrian path of travel



N. San Pedro,
San Rafael

SUMMARY OF 62 CROSSINGS

17 crossings WITH pedestrian path of travel BUT are inside other jurisdiction's property

» Santa Rosa, Rohnert Park, Cotati, Novato, San Rafael



Golf Course Dr, Rohnert Park

While no additional or remedial measures can be substituted for exercising caution, paying attention and being aware of one's surroundings near the Railroad tracks, our task force reported to the General Manager that two additional measures may force the pedestrians to pay attention:

- » **Channel Crossing options/ fencing**
- » **Ground stencils**

CHANNELIZATION OPTIONS



GROUND STENCILS



ENHANCEMENT SUMMARY

- 20 of 62 crossings have NO pedestrian path (dirt)
- 30 of 62 have a pedestrian path of travel

- For roughly \$300,000
 - » Enhance 30 of the 62 crossings that have a pedestrian path of travel with added concrete, fencing, stencils
 - 13 within SMART's property
 - 17 outside SMART's property requiring outside jurisdiction

A Day In The Life of **SMART Operations**

OPERATIONS OVERVIEW

- SMART Operations consists of three divisions:
 - Transportation
 - Vehicle Maintenance
 - Track, Train Control and Signal System Maintenance
- 88 Full-Time Employees
- 24-hour operation, seven days a week
- 14 Diesel Multiple Units (DMU) in service
 - 4 more being commissioned
- 43 Miles of Track (with more to come!)

TRANSPORTATION

- Engineers
- Conductors
- Bridge Tenders
- Controller Supervisors
- Operations Center

ENGINEER-CONDUCTORS - 3:30AM

Train crews check in at Control Center to receive their train orders and equipment for the day



ENGINEER-CONDUCTORS - 3:45AM

Train crews check their train in the yard before pullout



ENGINEER-CONDUCTORS - 4:00AM

After receiving authorization from Control Center, train pulls out of yard to stage at Sonoma County Airport Station



ENGINEER-CONDUCTORS - 4:19AM

First Southbound departure from Sonoma County Airport



ENGINEER-CONDUCTORS - 7:00AM

All 4 trains in service at this time



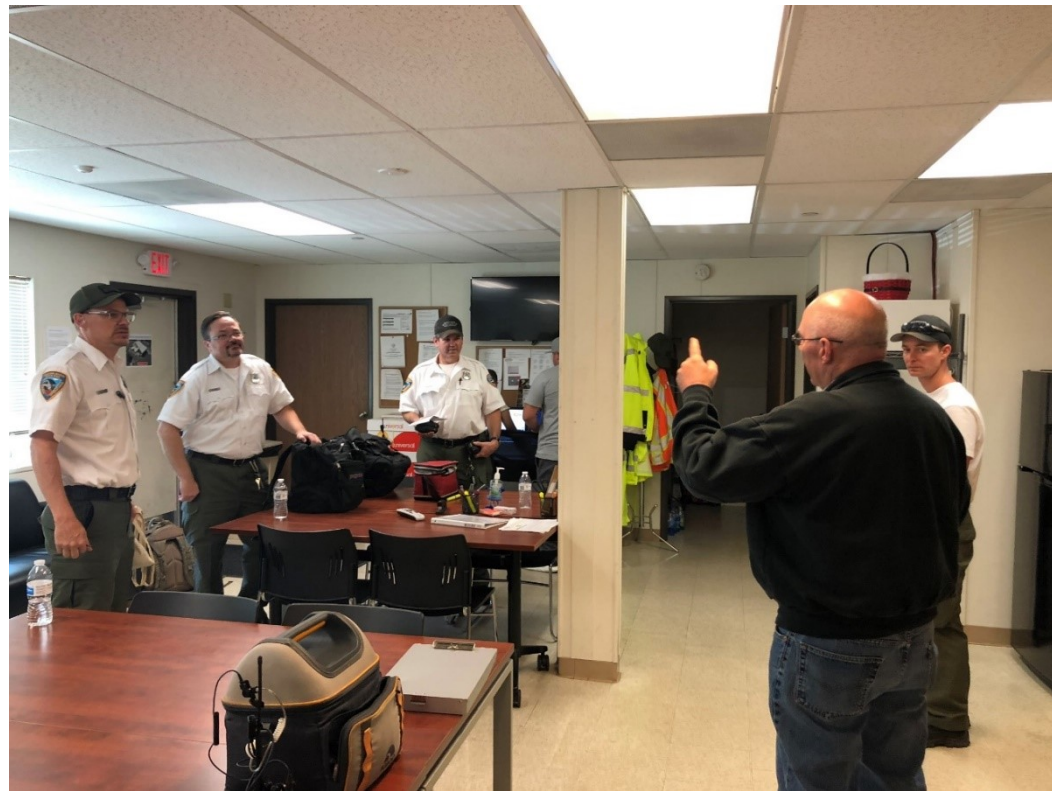
ENGINEER-CONDUCTORS - 7:00AM – 8:00PM

- Train service running with all 4 trains
- Conductors checking fares and assisting passengers
- Engineers operating the train
- Crews go on and off duty throughout the day



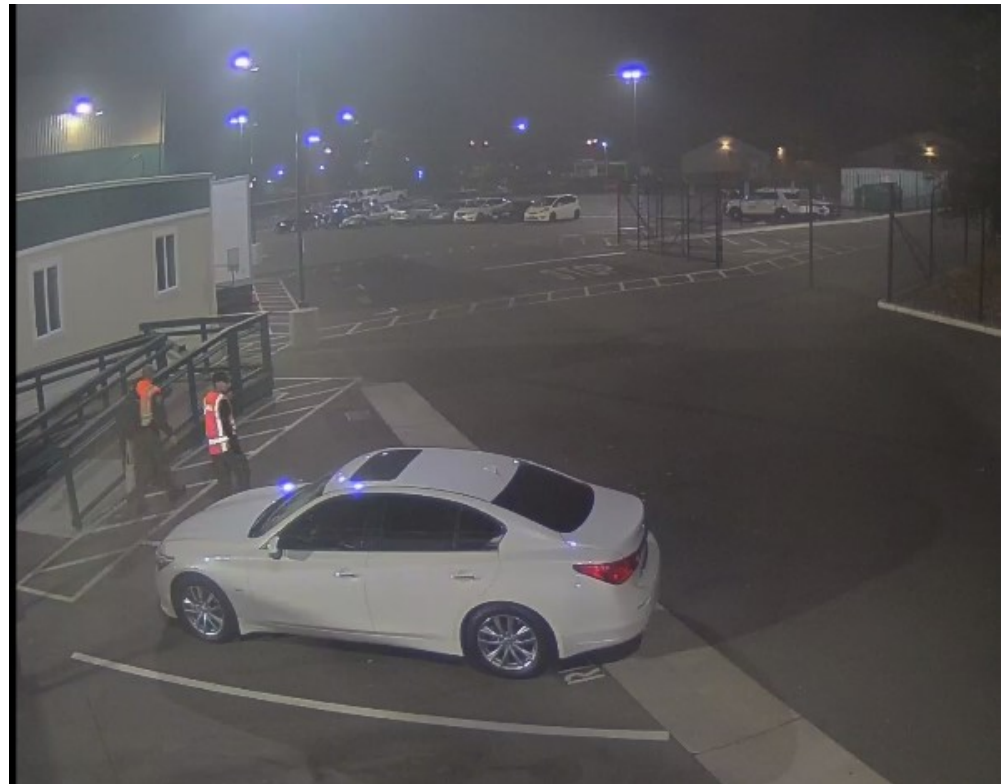
ENGINEER-CONDUCTORS - 7:00AM – 8:00PM

- Train crews who are not operating trains during the day participate in training.
- Staff meetings are held with train crews daily related to:
 - Safety Alerts
 - Daily Operations
 - Customer Service



ENGINEER-CONDUCTORS - 8:00PM – 10:00PM

- Diesel Multiple Units (DMU) are returned to the Rail Operations Center for night layover
- Crews check out from Rail Operation Center



HAYSTACK BRIDGE TENDERS

- Bridge Tenders on duty between 17 and 24 hours per day. Shifts are shared between two full time and one part time Bridge Tender
- Responsible for coordinating bridge operation with train and waterway traffic
- Responsible for inspecting bridge and ensuring proper operation



HAYSTACK BRIDGE TENDERS





CONTROLLER SUPERVISORS

The SMART Operations Control Center (OCC) is a 24/7/365 Operations Center responsible for managing and controlling the entire railroad. The Control Center is in communication with all federal, state, regional, and local public safety organizations.

OPERATION CONTROL CENTER

SMART's Control Center is a safety sensitive location. As such, no images of the control center are included in this slideshow, but..



CONTROLLER SUPERVISORS – 12:00AM – 1:00AM

- Release Daily Operating Bulletin
- Complete and email Daily Operating Report
- Dispatch any freight movements
- Dispatch any track repairs
- Dispatch any Test Trains
- Work on Foul reports
- Open Hours of Service tickets for crews

CONTROLLER SUPERVISORS - 4:00AM– 11:30AM

- Coordinate all mainline movement, (Trains and maintenance and Freight)
- Check in crews. Job Brief with crews. Verify that crews are fit for duty.
- Report any mechanical issues with trains to Vehicle Maintenance Department
- Respond to all incidents
- Coordinate Bridge/Maritime traffic with train traffic.
- Monitor systems for issues such as clipper machine malfunctions & crossing gates
- Keep up to date notification for train delays, incidents, clipper machine issues

CONTROLLER SUPERVISORS 10:30PM – 12:00AM

- Coordinate final trains into yard at end of the operating day
- Close out log of all issues and reports
- Begin working on the night reports

FIELD SUPERVISORS 4:00AM – 5:30AM

- This position travels independently from trains up and down the corridor
- Perform Federal Railroad Administration required test on Engineer-Conductors
- Customer Service at platforms and parking lots
- Respond to reports of trespassers
- Shadow first train San Rafael
- Train new Engineer Conductors, Bridge Tenders



FIELD SUPERVISORS 5:30AM – 10:00PM



- Resolve lost and found issues reported by passengers
- Shadow the last train back to Rail Operation Center
- Stand by for any customer related issues and right-of-way issues such as trespassers , fares evaders, etc.

AHEAD OF THE CURVE!

- Senate Bill 502 signed by the governor on September 20th requires that all commuter rail systems have AED by July 2020. SMART is already compliant with this regulation.
- Every SMART Diesel Multiple Unit is equipped with AEDs and staff is trained to use them if needed.



REASONS FOR OCCASIONAL DELAYS

| CAUSE OF DELAY | |
|--|-----|
| Signals and Maintenance | 38% |
| Motor Vehicle Related Incidents | 25% |
| Vehicle Maintenance | 12% |
| Fatality/Incident | 10% |
| Station Delays | 8% |
| Police and Fire | 6% |
| Utilities Electrical and Gas Incidents | 1% |

IT'S ALL ABOUT PERFORMANCE

| Month | One Way Trips | Average On Time Performance |
|----------------|---------------|-----------------------------|
| August 2017 | 178 | 96.7% |
| September 2017 | 776 | 99.8% |
| October 2017 | 787 | 94.1% |
| November 2017 | 756 | 99.4% |
| December 2017 | 790 | 99.1% |
| January 2018 | 832 | 98.4% |
| February 2018 | 736 | 99.8% |
| March 2018 | 838 | 99.8% |
| April 2018 | 804 | 100% |
| May 2018 | 836 | 99.6% |
| June 2018 | 803 | 97.3% |
| July 2018 | 814 | 98.4% |
| August 2018 | 862 | 83.7% |
| TOTAL: | 9,812 | 97.1% |

Title VI goal compliance is 95%

DAY IN THE LIFE OF VEHICLE MAINTENANCE

**24 hours a day, 7 days a week, 365 days a year –
Vehicle Maintenance is working to make sure
they provide a safe, quality vehicle.**

9:00PM

- Diesel Multiple Units begin to arrive for the night.
- Diesel Multiple Units run through train wash



9:30PM

- Diesel Multiple Units begin to arrive for the night.
- Diesel Multiple Units placed on shop air.
- Diesel Multiple Units cleaning and waste removal is done



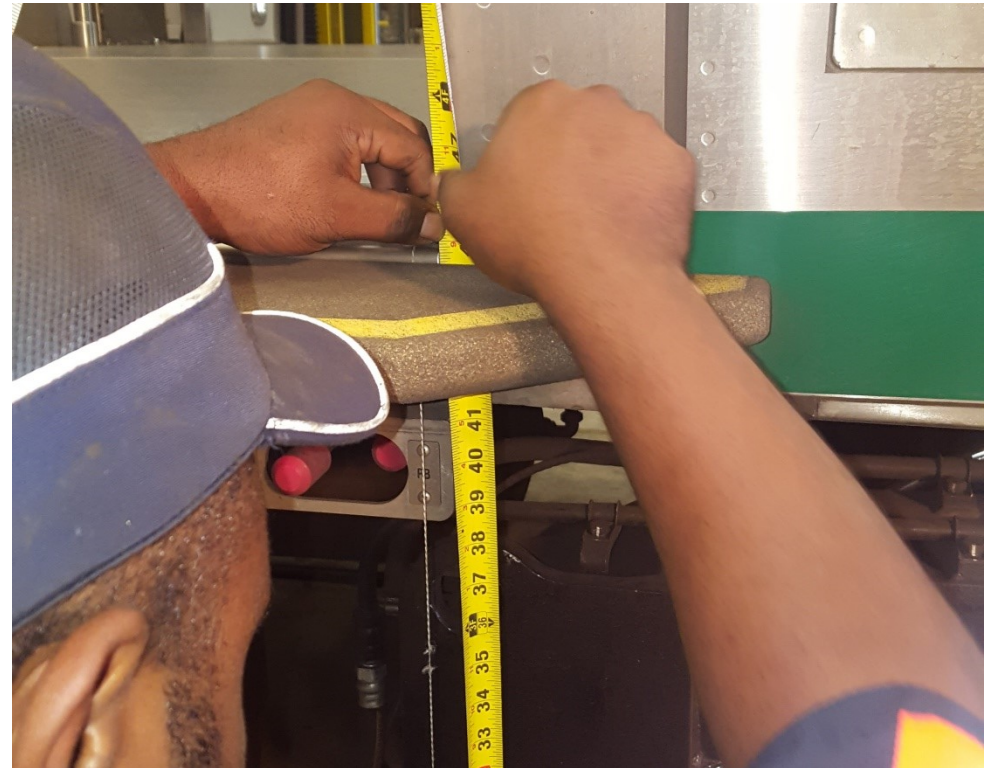
10:00PM

- Cleaning of Diesel Multiple Units continues
- Trash Removed
- Car mopped



10:30PM

- Inspections and Maintenance on Diesel Multiple Units (DMU) begins
- Brake Tests
- Wheel inspections
- Federal Railroad Administration required inspections
- This photo shows a Vehicle Maintenance technician measuring the ride height of the DMU to ensure level boarding at the platform.



10:30PM

- Inspections and Maintenance on Diesel Multiple Units (DMU) begins
- Brake Tests
- Wheel inspections
- Federal Railroad Administration required inspections
- Photo shows a SMART Vehicle Maintenance technician inspecting a rail wheel. These inspections are done daily to make sure that they are compliant with all federal regulations and safe to be used during revenue service. This inspection must be completed on all 112 wheels every week



11:00PM

- Diesel Multiple Units exterior and interior inspections
- First of two daily interior inspections and cleanings
 - Checking and cleaning every seat recliner and every tray table in the passenger area
 - Checking and cleaning restroom



12:15AM – 4:00AM

Vehicle Maintenance performs brake tests and system checks on 14 Diesel Multiple Units every night



4:00AM

- Once all maintenance is complete, and staff are clear of the vehicle, Vehicle Maintenance removes “Blue Flag” Protection from the Diesel Multiple Units (DMU).

“Blue Flags” Protect Maintenance working in, on, under, or around rail vehicles

- Notify Dispatch that DMUs are ready for passenger service



4:00AM – 6:00AM

- Vehicle Maintenance does troubleshooting and repairs on any defects found during inspections
- Scheduled Maintenance
- End of 3rd shift and Transfer to 1st shift



6:00AM – 10:30AM

- Work on Maintenance and repairs
- Truck and wheel work
- HVAC Cleaning and service



10:30AM – 1:30PM

- Morning trains return to shop for mid-day layover
- 2nd of twice daily interior inspection and cleaning is completed
- Minor repairs from morning operation
- Dump waste tanks



11:00AM – 1:30PM

Work with concession stand staff to load vehicle with drinks and snacks



2:00PM – 2:30PM

- End of 1st shift and transfer work to 2nd shift
- Vehicle Maintenance uses a whiteboard to assist with organizing and scheduling daily maintenance activities and yard operations to optimize Diesel Multiple Unit availability for Operation

| | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY | SUNDAY |
|--------------------------|-----------------------------|---------------------------------------|---------------------|---------------------------------|-------------------------|----------|--------|
| MAY | 29 | 30 | 31 | 1 | 2 | 3 | 4 |
| Y 1 107 108 | TRAIN 1 1003 | TRAIN 4 0600 | TRAIN 4 0600 | TRAIN 1 0430 | TRAIN 2 0500 | | |
| Y 2 103 110 | TRAIN 2 1203 | TRAIN 3 0530 | SAND BAG REMOVAL | 103 368 DAY WSP. | 103 368 DAY INSP. | | |
| Y 3 101 102 | | PROTECT SET | PROTECT SET | | TRAIN 1 0430 | | |
| Y 6 113 106 | | TRAIN 1 0430 | TRAIN 3 0530 | Precision Witness TRAIN 4 | TRAIN 3 0530 | | |
| Y 5 105 104 | | TRAIN 2 0500 | TRAIN 2 0500 | TRAIN 3 0530 | TRAIN 4 0600 | | |
| Y 4 111 112 | | | TRAIN 1 0430 | TRAIN 2 0500 | PROTECT | | |
| S 1 114 101 102 | 114 B/D TRANS 109 AX DAM | 114 CUMMINS TO DROP Eng/CB TONS | → | → | → | → | → |

2:30PM – 8:00PM

- Diesel Multiple Units (DMU) heavy maintenance
- Repairs
- Damage to DMU shown from hitting an “aggressive” turkey at 45 MPH. The temporary repair allowed us to get the DMU back to the shop safely, keeping all parts and material connected until it could be safely removed and repaired.



2:30PM – 8:00PM

- Diesel Multiple Units (DMU) heavy maintenance
- Repairs
- Repair of fiberglass panel of DMU in progress.
- The photo shows the damaged fiberglass skirt being repaired by a SMART Vehicle Technician. Fiberglass repairs are handled in house.



2:30PM – 8:00PM

- Diesel Multiple Unit (DMU) heavy maintenance
- Repairs
- Final completed repair of DMU. Ready to place back in service in two days. As shown, this repair returns the DMU to a like new condition.
- The DMU strikes debris on the right of way on a semi regular basis. Our vehicle maintenance team is able to quickly and efficiently make repairs that keep our DMUs in service.



2:30PM – 8:00PM

- Servicing of onboard fire suppression system.
- The onboard fire suppression system detects any fire or extreme heat situations and automatically disperses a white chemical fire suppressant. This prevents and extinguishes any fires under the Diesel Multiple Unit (DMU)



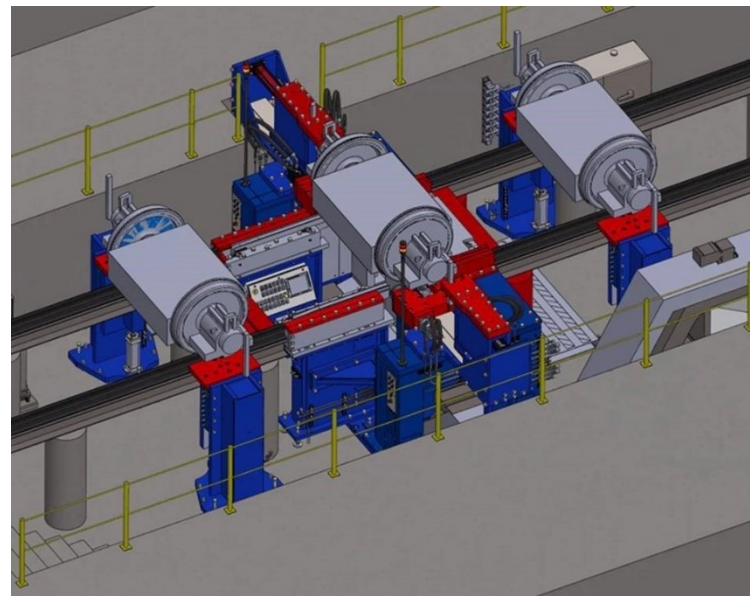
2:30PM – 8:00PM

- Truck work
- Removal of wheels
- Wheels removed to address flat spots and correct ride quality issues. This photo shows a Diesel Multiple Unit (DMU) Truck up in the air. The wheels have been rolled out from under the truck.
- New wheels are rolled into place under the truck. The truck is then reinstalled on the DMU and the DMU is placed back in service.



2:30PM – 8:00PM

- Shipping of wheels to Utah for truing
- Wheels that were removed from the DMU are now being trucked to Utah where they will be wheel trued. Typical total turnaround time for the shipping and truing of the wheels is 21 days. This has always been a concern due to DMUs being held out of service.
- Thank you to the Board of Directors and SB 1. We will soon have our own wheel truing machine and will be able to true wheels onsite.



8:00PM – 10:00PM

- Preparing for arrival of evening trains for overnight maintenance.
- Begin daily maintenance and inspection work on trains as soon as they arrive.



SMART INVENTORY CONTROL

PARTS ROOM - 24 HOURS A DAY

- Receive parts from outside shippers
- Build service kits from on hand inventory to perform scheduled maintenance
- Issue parts to work orders
- Organize and maintain the storeroom
- Contact vendors to request quotes and place orders
- Reference engineering drawings to find part numbers and vendor information



PARTS ROOM - 24 HOURS A DAY

- Receive orders and unload trucks.
- Monitor inventory levels.
- Review invoices. Check invoice accuracy against orders and receipts.
- Send reviewed invoice reports to Finance for payment.



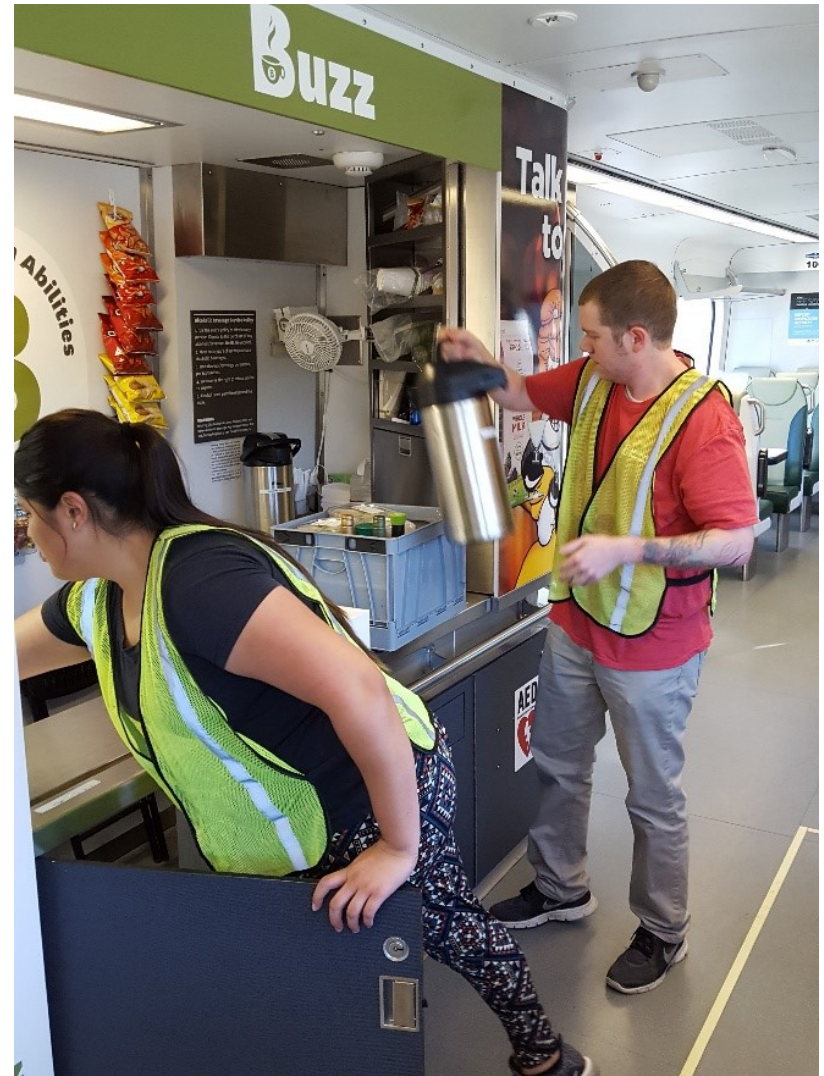
VEHICLE MAINTENANCE TEAM



BECOMING INDEPENDENT BUZZ CONCESSIONS

12:30PM – 10:00PM

- Onboard Concession stand staff serving snacks throughout the day.
- Wine and Beer available in the afternoon.
- Cars are stocked daily with fresh foods and drinks.



DAY IN THE LIFE – TRACK, TRAIN CONTROL, AND SIGNAL SYSTEM MAINTENANCE

**Signal Maintenance, Track Maintenance,
Facility Maintenance**

SIGNALS - 4:00AM – 5:00AM

- Signal staff arrives at Fulton and Roblar offices
- Receive work orders
- Checks in with Dispatch and prepare for work day



5:00AM – 10:00AM

- Signal staff completes routine inspections and maintenance on crossings and signals.
- Part of their routine maintenance is making adjustments to the counter weights so the gate raises and lowers correctly.



10:00AM – 1:30PM

- Signal staff performs routine switch inspections and annual crossing inspections
- There are blocks of time (referred to as windows) currently available during mid-day train service that accommodate tests affecting the grade crossing warning or signal system.
- During this time Signal Technicians check the adjustment of each power switch monthly as required by the FRA. We have 25 power switches in service now.



10:00AM – 1:30PM

- Signal staff performs routine switch inspections and annual crossing inspections
- There are blocks of time (referred to as windows) currently available during mid-day train service that accommodate tests affecting the grade crossing warning or signal system.
- Annual crossing inspections at each of our 63 grade crossings with automatic warning devices occurs during these windows. Inspections include warning time verification, crossing functional testing, voltage readings (photo at right), and much more.



1:30PM –4:30PM

- Responding to any trouble calls in the field (broken gates, commercial power outages, other issues reported by public)
- Continuing work on Federal Railroad Administration required inspections
- The photo at right shows a crossing gate that was struck by a vehicle at River Road in Fulton



1:30PM –4:30PM

- Perform maintenance activities like Gate Saver installs, incandescent light upgrades to LED
- Continuing work on Federal Railroad Administration required inspections
- The signal team installing a gate saver device at River Road. This device is designed to reduce the chances of a gate being broken when struck by a vehicle



1:30PM –4:30PM

The signal team making final adjustments after installation of the gate saver at River Road. The balance of the gate needed to be adjusted due to the heavier gate saver being installed.



1:30PM – 4:30PM

- Graffiti abatement on Central Instrument Locations (CILs)
- The CIL is a case that holds grade crossing and signal control equipment and a favorite canvas for some of the local youth artists



4:30PM – 10:00PM

- Signal Technicians strategically locate themselves to be available for quick response to trouble calls during rush hour and peak commute times
- During this time they continue to perform routine maintenance such as cleaning the signal lenses at the crossings, vegetation removal around the CIL's, and graffiti abatement
- There are two Technicians on duty until the last train of the evening arrives at the Rail Operation Center



TRACKS - 6:00AM–6:30AM

- Arrive on site at Fulton and Roblar
- Receive work orders
- Prepare for track work out on SMART's right-of-way



6:30AM–8:30AM

- Perform a daily sweep of the Santa Rosa area.
 - Pick up trash
 - Clear homeless debris
- Make inspections of other high traffic areas prone to trash and debris accumulation



8:30AM–10:30AM

- Work on vegetation removal on right of way
- The work in this photo is being done to a tree located on a neighboring business's property. The limbs were overgrowing far enough into SMART's right of way that they were affecting the engineer's ability to see a train control signal.



10:30AM–1:00PM

- Perform mid-day track inspections
- These inspections are done on all 43 miles of the SMART railroad two times a week. These are required by the Federal Railroad Administration and include both the main track and the sidings. During the inspection, SMART staff are looking for:
 - Track surface irregularities
 - Vegetation issues
 - Switch and turnout conditions
- Perform mid day track maintenance projects that require being on our fouling the track. The workers at the right are tamping ballast under the ties to raise up a low spot in the rail.



10:30AM–1:00PM

- Perform switch inspections. These inspections are separate from, and in addition to, inspections performed by the Signal Maintenance group.
- Displayed in the photo to the right is a track inspector using a taper gauge. This tool is used to measure some of the wear points on a railroad switch.
- Measurements are also taken of the distance between the two rails and the elevation difference from rail to rail.



10:30AM–1:00PM

- All track and switch inspections are documented as required by the Federal Railroad Administration
- The Track Inspector takes and records measurements while a Maintainer performs routine maintenance such as cleaning and lubricating the moveable switch components
- SMART has a total of 41 switches that require monthly inspections.



10:30AM–1:00PM

- Occasionally smaller segments of track will settle over time and need to be adjusted back to proper elevations.
- The track at the San Rafael platform was one of these locations and was causing a mismatch between the platform and Diesel Multiple Unit interface. The track was raised to the proper elevation with hand jacks with ballast tamped under the ties with a tamper machine.



1:00PM–3:00PM

- Continue work on vegetation removal until end of shift at 3 pm.
- Respond to trouble calls (livestock on right of way, storm damage)



MOTHER NATURE

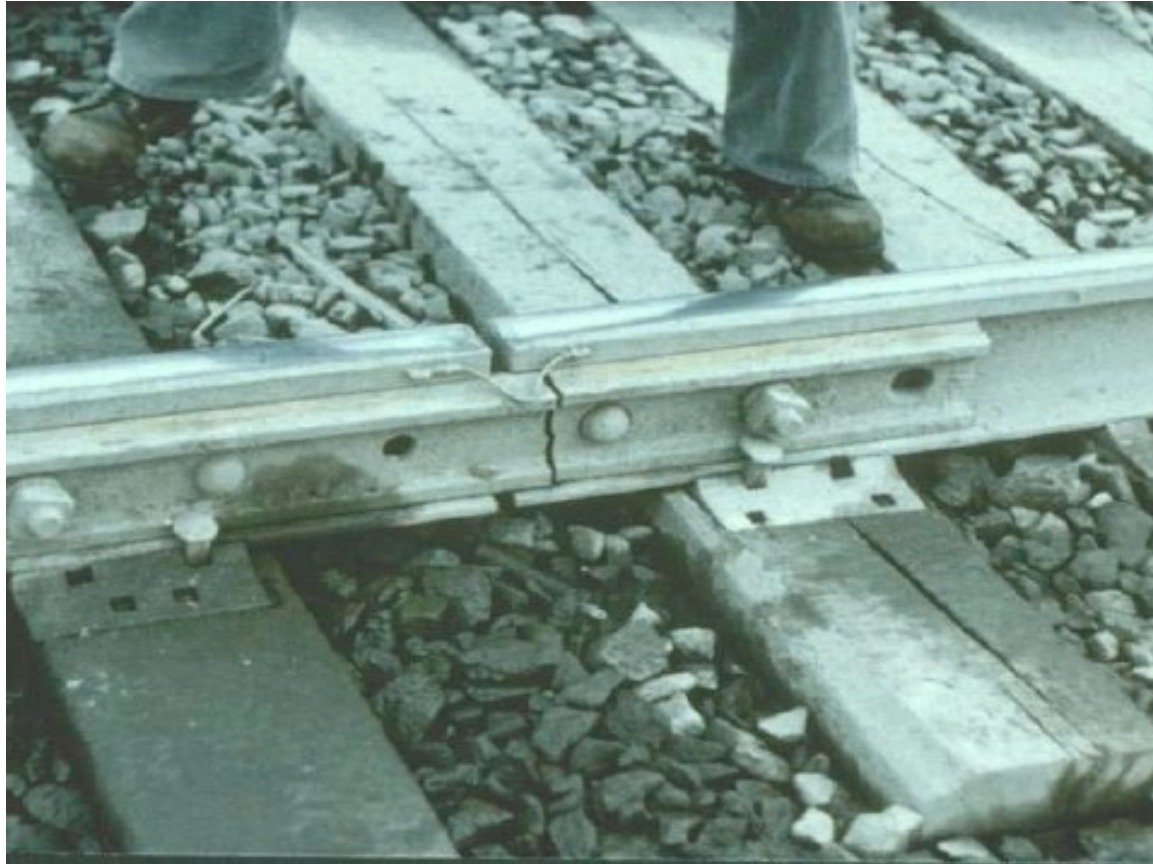
- When the air temperature exceeds, or is forecast to exceed, 100° a special inspection of continuous welded rail must be performed during the heat of the day (noon – 6 pm).
- Inspectors look for signs of thermal rail expansion like wavy or kinky rail, disturbed ballast, or longitudinal rail movement.
- These inspections are required in our FRA mandated Continuous Welded Rail Maintenance Plan



**Not SMART's Track!
Illustration purpose**

MOTHER NATURE AGAIN

- Special track inspections due to heat, heavy rainfall, freezing temperature etc.
- Extreme cold weather subjects the rail to high internal tensile forces as it tries to shrink.
- Special inspections are conducted when the rail temperature drops below 30° to look for broken rails, curve movement, and cracked or broken angle bars.
- These inspections are also required by the Federal Railroad Administration



**Not SMART's Track
Illustration purpose**

FACILITIES - 6:00AM–6:30AM

- Arrive at Fulton. Get work assignments for the day.
- Each day is different for Facility Maintenance
- Monthly scheduled preventative maintenance activities at each station, the Rail Operation Center, Roblar, Fulton, Healdsburg and Haystack bridge.



6:30AM–2:30PM

Bridge Maintenance:

The facilities group is responsible for maintenance and repair of all mechanical and electrical bridge components, except for the signal system. This includes the engine room, electrical room, and backup generator.



6:30AM–2:30PM

Office Improvement:

The facility maintenance team makes improvements to SMART facilities. Staff has experience working in construction, maintenance, plumbing, electrical and landscaping.



6:30AM–2:30PM

Cleaning and Maintenance:

The facility maintenance team keeps the Rail Operation Center (ROC) in excellent condition. They perform monthly maintenance on the ROC covering all aspects of the offices, shop, and other infrastructure



6:30AM–2:30PM

Platform maintenance:

- The Facility Maintenance team performs maintenance and cleaning on 12 platforms at 10 stations monthly
- Cleaning
- Graffiti abatement
- Testing lights and emergency telephones
- Inspecting electrical and communication cabinets
- Vegetation control around station and parking lots
- Anti-graffiti film replacement as needed



6:30AM–2:30PM

- SMART has approximately 45 linear miles of chain link fencing to maintain
- The fencing along the SMART Right-of-Way is frequently cut at various locations. The facility maintenance crew responds to any reported fence cuts or breaks. They quickly repair the fence when these issues are reported.



6:30AM–2:30PM

- SMART currently has approximately 9 miles of Multi Use Pathway (MUP) to maintain
- MUP maintenance includes trash removal, vegetation and weed cutting, tree trimming, and graffiti abatement



OPERATIONS SUPPORT

RADIO SYSTEM

- Programming of radio handsets
- Troubleshooting and maintenance of issues with handheld radio devices



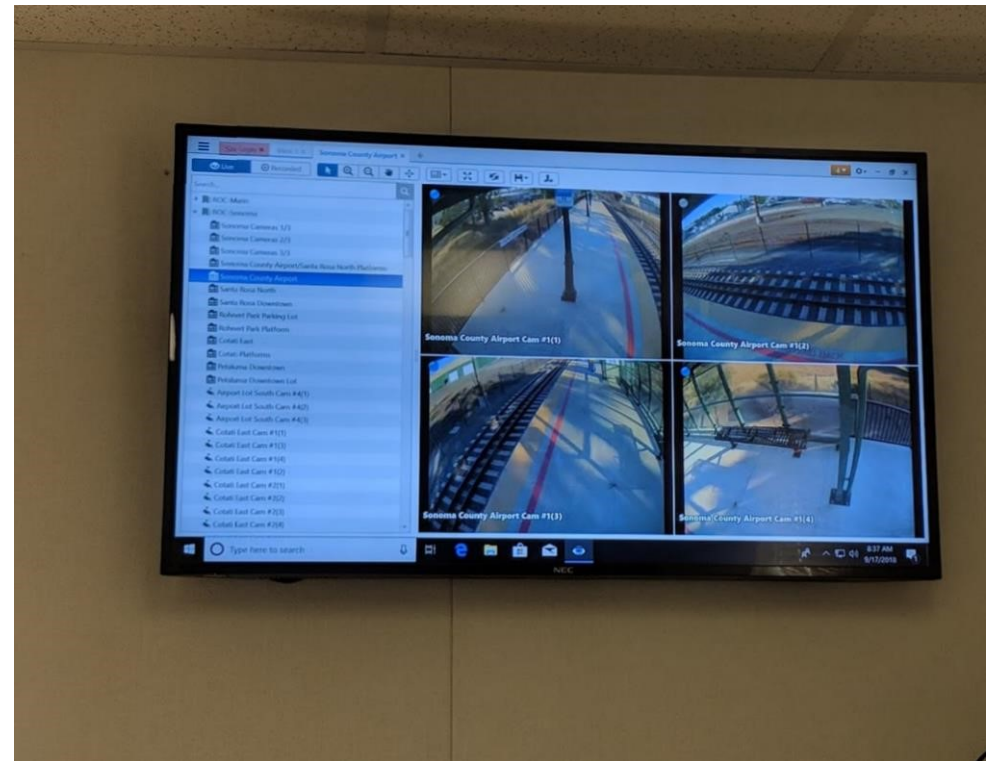
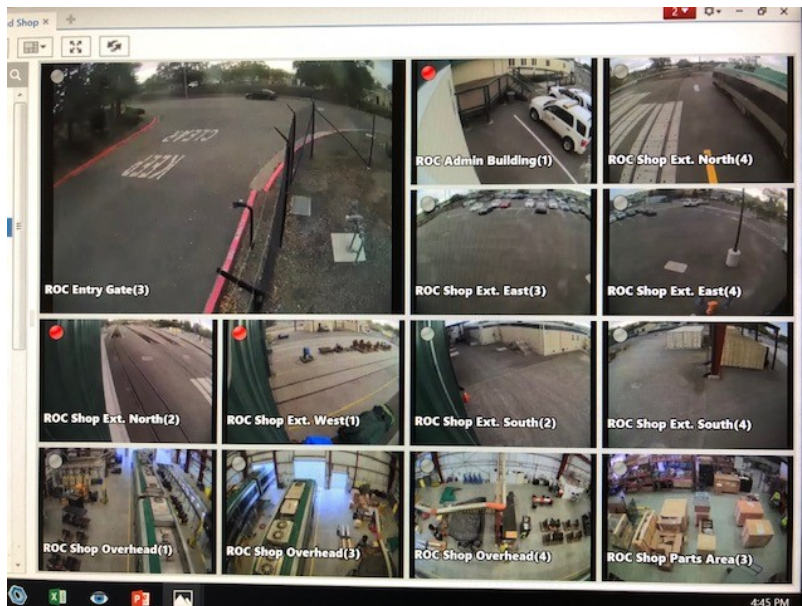
RADIO SYSTEM

- Monitoring of overall system performance.
- Liaison with Radio system contractor for system maintenance and upgrades.

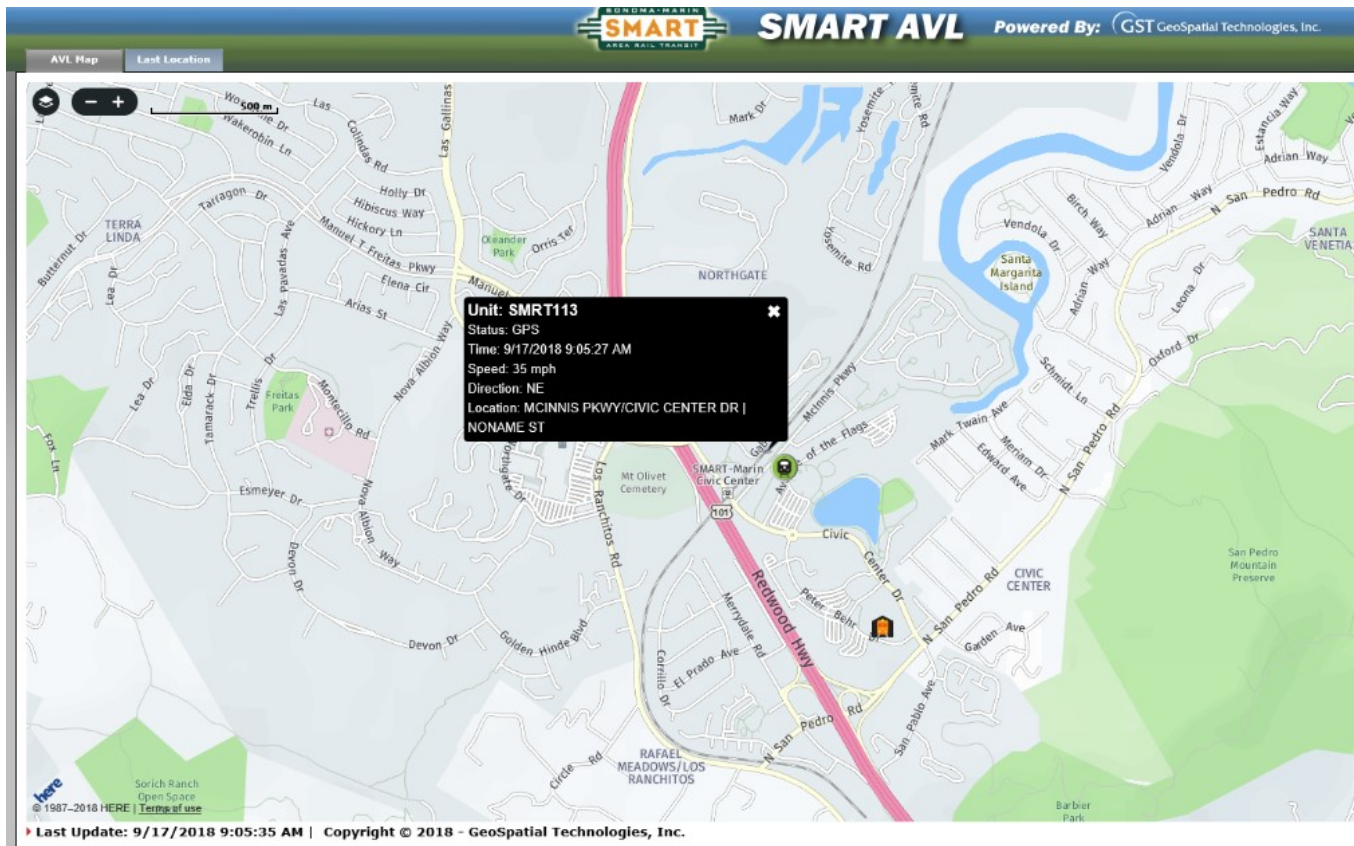


CCTV

- Monitoring of the daily performance of the SMART CCTV system.
- Troubleshooting and correction of issues that develop with the system.



- Monitoring of daily performance of the SMART Automatic Vehicle Location system.
- This system reports Diesel Multiple Unit (DMU) and SMART road vehicle locations to SMART Operations and SMART Public Safety Departments



Operations Training for the following:

- Fare Collection
- Handheld Card Reader (HCR 4)
 - Maintenance
 - Operations
- SMART Mobile Application
- Clipper Card
- E-Tickets



Operations Training for the following:

- American with Disabilities Act Training
- Bloodborne Pathogen Awareness Training
- Customer Service Training
- Passenger Train Emergency Preparedness Training
- Title VI Training



- Currently SMART Operations has 24 Non-Revenue Fleet vehicles.
- SMART has a great opportunity working with Sonoma County Fleet Services and staff and has gained knowledge and Mentorship as SMART continues to grow.



SMART Operations has four facilities (one not yet active with employees - Healdsburg) and 88 employees. Below lists other daily experiences:

- Provide all office and operations employee needs at three locations.
- Work with vendors/contractors and manage several service agreements pertaining to employees and facilities needs.
- Monitors the gate when delivery and guests/visitors arrive. Security is very important at the Rail Operation Center – This helps to ensure security and safety for all.
- Assist/manage travel, expenses, badges, process invoices, assist with incidents as needed, work with Becoming Independent

