- This contains all service affecting faults (those resulting in unavailability, delay to service start, delays or cancellations in service) on NGR trains from the first service on 11/12/18 to 13/07/2018
- 2. While everything possible is done to avoid cancelling services, it is normal for faults to be identified through the introduction of a new fleet, and the manufacturer is expected fault find and tune the setup of equipment as it starts to be heavily used (for example, doors)
- 3. Door faults were the highest cause of cancellations in the requested time period, with 12 cancellations from 11th December to 13th July 2018. A decreasing trend by month can be seen over this period, while the number of trains in service increases. No trains were cancelled due to door faults in the last two months of this period
- 4. Comparable data for other QR fleet is not available, however door faults are one of the highest occurring failures in Citytrain, across all rollingstock.
- 5. Performance and reliability of the NGR fleet is steadily improving over time, and in late July the fleet passed 1 million km in operational service

| Business_Date | Issue_Types | Multiple_Unit_Code | Event_Class | Event_Class_Type |
|---------------|----------------------|--------------------|--------------|------------------|
| 11/12/2017 | IP Switch | 704 | Delay | N/A |
| 15/12/2017 | Pantograph | 705 | Delay | N/A |
| 15/12/2017 | Pantograph | 705 | Unavailable | Unavailable |
| 15/12/2017 | Pantograph | 706 | Delay | N/A |
| 18/12/2017 | Door | 705 | Cancellation | CVT1 |
| 18/12/2017 | Door | 705 | Delay | N/A |
| 27/12/2017 | Toilet | 704 | Delay | N/A |
| 27/12/2017 | Toilet | 704 | Delay | N/A |
| 27/12/2017 | Door | 705 | Cancellation | T1 |
| 27/12/2017 | Door | 705 | Delay | N/A |
| 27/12/2017 | DVR | 706 | Unavailable | Unavailable |
| 3/01/2018 | Door | 705 | Cancellation | T1 |
| 3/01/2018 | Door | 705 | Delay | N/A |
| 3/01/2018 | Door | 705 | Delay | N/A |
| 5/01/2018 | Door | 706 | Cancellation | T2 |
| 5/01/2018 | Door | 706 | Delay | N/A |
| 6/01/2018 | Bodyside Cameras | 706 | Delay | N/A |
| 10/01/2018 | PEI (C) | 713 | Cancellation | T1 |
| 10/01/2018 | PEI | 713 | Delay | N/A |
| 12/01/2018 | Brakes | 704 | Cancellation | T1 |
| 13/01/2018 | Brake Pipe | 704 | Unavailable | Unavailable |
| 13/01/2018 | O Depot | 706 | Unavailable | Unavailable |
| 13/01/2018 | Brakes | 713 | Delay | N/A |
| 16/01/2018 | PEI | 713 | Delay | N/A |
| 16/01/2018 | Main Circuit Breaker | 713 | Delay | N/A |
| 17/01/2018 | Horn | 705 | Cancellation | T1 |

| 20/01/2018 | HVAC | 705 | Cancellation | T2 |
|------------|----------------|-----|--------------|-------------|
| 20/01/2018 | HVAC | 705 | Delay | N/A |
| 20/01/2018 | Radio | 705 | Cancellation | T1 |
| 21/01/2018 | Door | 708 | Delay | N/A |
| 21/01/2018 | Door | 708 | Delay | N/A |
| 23/01/2018 | Door | 713 | Delay | N/A |
| 29/01/2018 | HVAC | 705 | Cancellation | (72) |
| 29/01/2018 | Late | 708 | Delay | N/A |
| 31/01/2018 | Brakes | 713 | Delay | N/A |
| 31/01/2018 | Brakes | 713 | Unavailable | Unavailable |
| 3/02/2018 | Mirrors | 706 | Cancellation | T2 |
| 3/02/2018 | Door | 706 | Delay | N/A |
| 5/02/2018 | Door | 706 | 29 Delay | N/A |
| 7/02/2018 | Door | 705 | Delay | N/A |
| 7/02/2018 | Door | 705 | Delay | N/A |
| 7/02/2018 | Door | 705 | Delay | N/A |
| 8/02/2018 | Door | ×10 | Delay | N/A |
| 17/02/2018 | Sand Tranducer | 710 | Cancellation | T2 |
| 17/02/2018 | Door | 713 | Cancellation | T1 |
| 17/02/2018 | Door & | 713 | Delay | N/A |
| 19/02/2018 | Adhoc | 708 | Delay | N/A |
| 19/02/2018 | Sand Tranducer | 710 | Cancellation | T2 |
| 19/02/2018 | Cab Seat | 714 | Delay | N/A |
| 20/02/2018 | Sand Tranducer | 710 | Unavailable | Unavailable |
| 20/02/2018 | Sand Tranducer | 714 | Cancellation | T1 |
| 20/02/2018 | Sand Tranducer | 714 | Delay | N/A |
| 21/02/2018 | Door | 705 | Delay | N/A |
| 23/02/2018 | Door | 706 | Delay | N/A |
| 23/02/2018 | Door | 713 | Delay | N/A |

| 25/02/2018 | Adhoc | 708 | Cancellation | T1 |
|------------|------------------------|---|--------------|-------------|
| 26/02/2018 | PEI | 703 | Delay | N/A |
| 26/02/2018 | Pantograph | 703 | Delay | N/A |
| 26/02/2018 | Pantograph | 703 | Cancellation | T2 |
| 26/02/2018 | Door | 714 | Delay | N/A |
| 27/02/2018 | Door | 714 | Cancellation | T1 600 |
| 28/02/2018 | Door | 710 | Delay | 0(%) |
| 27/02/2018 | Door | 714 | Delay | N/A |
| 28/02/2018 | Harmonic Filter | 709 | Unavailable | Unavailable |
| 28/02/2018 | Door | 710 | Delay | N/A |
| 14/03/2018 | Door | 705 | Cancellation | N/A |
| 1/03/2018 | HMI | 708 | Delay | N/A |
| 1/03/2018 | HMI | 708 | Delay | N/A |
| 1/03/2018 | PEI | 709 | Delay | N/A |
| 1/03/2018 | PEI | 713 | Delay | N/A |
| 1/03/2018 | PEI | \$14 | Delay | N/A |
| 3/03/2018 | Brakes | V / V / V / V / V / V / V / V / V / V / | Delay | N/A |
| 3/03/2018 | HVAC | 713 | Delay | N/A |
| 5/03/2018 | Door | 710 | Delay | N/A |
| 6/03/2018 | Wheel Slide Protection | 706 | Delay | N/A |
| 7/03/2018 | Bodyside Cameras | 706 | Delay | N/A |
| 12/03/2018 | Door | 712 | Delay | N/A |
| 12/03/2018 | Door | 714 | Delay | N/A |
| 13/03/2018 | Door | 709 | Delay | N/A |
| 10/04/2018 | Door | 716 | Cancellation | T1 |
| 14/03/2018 | Door | 705 | Delay | N/A |
| 14/03/2018 | Door | 712 | Delay | N/A |
| 16/03/2018 | PEI | 705 | Delay | |
| 17/03/2028 | PWM | 709 | Cancellation | T2 |

| 17/03/2018 | PWM | 709 | Delay | |
|------------|--------------------------------|-----|--------------|-------|
| 18/03/2018 | Pantograph | 705 | Delay | |
| 19/03/2018 | Wheel Slide Protection | 705 | Cancellation | T1 |
| 19/03/2018 | Wheel Slide Protection | 705 | Delay | |
| 19/03/2018 | Brakes | 710 | Delay | 6 |
| 21/03/2018 | Pantograph | 703 | Delay | 60 |
| 21/03/2018 | HMI | 705 | Delay | 6(8)0 |
| 21/03/2018 | Windscreen Wiper | 712 | Delay | RY |
| 21/03/2018 | Windscreen Wiper | 712 | Cancellation | T2 |
| 22/03/2018 | Horn | 706 | Delay | J. |
| 22/03/2018 | Horn | 706 | Cancellation | T1 |
| 23/03/2018 | PWM | 714 | Delay | |
| 23/03/2018 | PWM | 714 | Cancellation | ? |
| 24/03/2018 | Door | 708 | Delay | |
| 25/03/2018 | Park Brake | 710 | Cancellation | T1 |
| 25/03/2018 | Park Brake | 714 | Cancellation | T1 |
| 26/03/2018 | Door | 708 | Delay | |
| 27/03/2018 | Cab Sound | 706 | Cancellation | T1 |
| 27/03/2018 | Radio | 706 | Delay | |
| 28/03/2018 | Headlights | 703 | Delay | |
| 28/03/2018 | Headlights | 703 | Cancellation | T1 |
| 28/03/2018 | Door | 703 | Delay | |
| 29/03/2018 | Windscreen washer water levels | 709 | Cancellation | T1 |
| 29/03/2018 | Windscreen washer water levels | 709 | Delay | |
| 3/04/2018 | Traction | 704 | Delay | |
| 3/04/2018 | Traction | 704 | Cancellation | T2 |
| 4/04/2018 | Door | 708 | Delay | |
| 4/04/2018 | НМІ | 713 | Delay | |
| 5/04/2018 | Wheel Slide Protection | 711 | Cancellation | T2 |

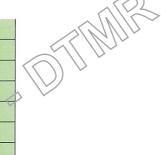
| F /04/2010 | Door | 711 | Delay | |
|------------|---------------------------------|-----|--------------|-------------|
| 5/04/2018 | | 711 | Cancellation | T2 |
| 6/04/2018 | Toilet | | | 12 |
| 6/04/2018 | Toilet | 712 | Delay | |
| 8/04/2018 | Door | 705 | Delay | |
| 8/04/2018 | AWS | 706 | Cancellation | T2 6 |
| 8/04/2018 | AWS | 706 | Delay | 850 |
| 9/04/2018 | PWM | 708 | Cancellation | (11) |
| 10/04/2018 | Door | 711 | Delay | 20 |
| 10/04/2018 | PWM | 712 | Cancellation | T1 |
| 10/04/2018 | PWM | 712 | Delay | V |
| 11/04/2018 | Door | 713 | Cancellation | T1 |
| 10/04/2018 | Door | 716 | Delay | |
| 16/04/2018 | Door | 703 | Delay | |
| 11/04/2018 | Door | 713 | Delay | |
| 11/04/2018 | Main Compressor Circuit Breaker | 716 | Cancellation | T2 |
| 11/04/2018 | Main Compressor Circuit Breaker | 716 | Delay | |
| 12/04/2018 | Wheel Slide Protection | 711 | Cancellation | T2 |
| 12/04/2018 | Depot | 704 | Cancellation | T1 |
| 12/04/2018 | Intercar bracket | 714 | Unavailable | Unavailable |
| 14/04/2018 | Pantograph 🔗 🗸 | 703 | Cancellation | T1 |
| 14/04/2018 | Pantograph | 703 | Delay | |
| 14/04/2018 | Line | 703 | Delay | |
| 14/04/2018 | Smoke Detector | 716 | Cancellation | T2 |
| 24/04/2018 | Door | 705 | Cancellation | T1 |
| 16/04/2018 | Door | 703 | Delay | |
| 16/04/2018 | Intercar bracket | 714 | Delay | |
| 17/04/2018 | HMI | 709 | Cancellation | T1 |
| 19/04/2018 | Sanding Test | 706 | Delay | |
| 21/04/2018 | Adhoc | 710 | Delay | |

| | Т | 1 | E CONTROL OF THE CONT | |
|------------|---------------------------|-----|--|------|
| 23/04/2018 | HMI | 706 | Delay | |
| 23/04/2018 | Door | 716 | Delay | |
| 18/05/2018 | Door | 710 | Cancellation | T1 |
| 24/04/2018 | Door | 705 | Delay | |
| 2/05/2018 | Radio | 704 | Delay | 6 |
| 2/05/2018 | PID | 716 | Delay | 650 |
| 2/05/2018 | PID | 716 | Cancellation | (fi) |
| 3/05/2018 | AWS | 718 | Delay | 69 |
| 3/05/2018 | AWS | 718 | Cancellation | T1 |
| 3/05/2018 | DVR | 718 | Delay | V |
| 6/05/2018 | Cab Seat | 709 | Delay | |
| 6/05/2018 | Smoke Detector | 712 | Delay | |
| 6/05/2018 | Cab Seat | 714 | Cancellation | T1 |
| 6/05/2018 | Cab Seat | 714 | Delay | |
| 6/05/2018 | Door | 716 | Delay | |
| 8/05/2018 | Toilet Fresh Water Levels | 203 | Cancellation | T2 |
| 8/05/2018 | Door | 716 | Delay | |
| 10/05/2018 | Main Circuit Breaker | 718 | Delay | |
| 10/05/2018 | Pantograph | 718 | Cancellation | T1 |
| 11/05/2018 | HVAC & | 704 | Cancellation | T2 |
| 11/05/2018 | HVAC | 704 | Delay | |
| 12/05/2018 | Main Circuit Breaker | 712 | Delay | |
| 17/05/2018 | Pantograph | 708 | Delay | |
| 17/05/2018 | HIM | 708 | Delay | |
| 19/05/2018 | Door | 706 | Cancellation | T1 |
| 18/05/2018 | Door | 710 | Delay | |
| 19/05/2018 | Door | 706 | Delay | |
| 20/05/2018 | Door | 710 | Delay | |
| 23/05/2018 | Main Circuit Breaker | 704 | Cancellation | T1 |

| 23/05/2018 | Main Circuit Breaker | 704 | Delay | |
|------------|--------------------------------------|-----|--------------|-------------|
| 23/05/2018 | Air leak | 714 | Delay | |
| 24/05/2018 | Main Circuit Breaker | 710 | Delay | |
| 24/05/2018 | Cab Driver Safety Control Foot Pedal | 713 | Cancellation | T2 |
| 24/05/2018 | Cab Driver Safety Control Foot Pedal | 713 | Delay | e " |
| 25/05/2018 | Door | 713 | Delay | 60 |
| 29/05/2018 | Air leak | 703 | Unavailable | Unavailable |
| 29/05/2018 | Air leak | 717 | Delay | PW |
| 29/05/2018 | Air Leak | 717 | Cancellation | T1 |
| 29/05/2018 | Park Brake | 718 | Unavailable | Unavailable |
| 31/05/2018 | Main Circuit Breaker | 716 | Delay | |
| 4/06/2018 | AWS | 704 | Cancellation | T2 |
| 4/06/2018 | AWS | 704 | Delay | |
| 4/06/2018 | Door | 718 | Delay | |
| 6/06/2018 | Door | 705 | Delay | |
| 8/06/2018 | Fire Alarm | 306 | Delay | |
| 8/06/2018 | Vigilance Alarm | X16 | Cancellation | T2 |
| 8/06/2018 | Depot | 717 | Cancellation | T1 |
| 9/06/2018 | Main Electrical Locker | 717 | Delay | |
| 10/06/2018 | Cab Vibration | 704 | Cancellation | T2 |
| 11/06/2018 | Radio | 704 | Delay | |
| 12/06/2018 | Door | 704 | Delay | |
| 12/06/2018 | Cab Driver Safety Control Foot Pedal | 716 | Cancellation | T2 |
| 12/06/2018 | Cab Driver Safety Control Foot Pedal | 716 | Delay | |
| 15/06/2018 | Headlights | 704 | Delay | |
| 15/06/2018 | Traction | 708 | Delay | |
| 15/06/2018 | Roof panel | 709 | Cancellation | T1 |
| 15/06/2018 | Headlights | 714 | Cancellation | T2 |
| 16/96/2018 | Traction | 714 | Delay | |

| 19/06/2018 | Door | 722 | Delay | |
|------------|-----------------|-----|--------------|-------------|
| 20/06/2018 | Door | 722 | Delay | |
| 22/06/2018 | Door | 723 | Delay | |
| 25/06/2018 | Unavailable | 706 | Unavailable | Unavailable |
| 25/06/2018 | AWS | 723 | Cancellation | T2 (%) |
| 26/06/2018 | Traction | 706 | Unavailable | Unavailable |
| 26/06/2018 | Adhoc | 713 | Delay | 6(%) |
| 26/06/2018 | Brakes | 714 | Delay | C9 |
| 27/06/2018 | Unavailable | 709 | Unavailable | Unavailable |
| 27/06/2018 | Door | 723 | Delay | 5 |
| 27/06/2018 | Toilet | 723 | Cancellation | T2 |
| 28/06/2018 | Transformer | 709 | Unavailable | Unavailable |
| 28/06/2018 | Unavailable | 716 | Cancellation | T2 |
| 28/06/2018 | Door | 722 | Delay | |
| 29/06/2018 | Door | 722 | Delay | |
| 30/06/2018 | Door | 711 | Delay | |
| 1/07/2018 | Door | XIA | Delay | |
| 2/07/2018 | Brakes | 711 | Cancellation | T1 |
| 3/07/2018 | Door | 711 | Delay | |
| 4/07/2018 | Door | 711 | Delay | |
| 4/07/2018 | Cab Maintenance | 716 | Delay | |
| 5/07/2018 | Radio | 704 | Cancellation | T1 |
| 5/07/2018 | Door \ | 705 | Delay | |
| 6/07/2018 | Door | 705 | Delay | |
| 7/07/2018 | Pantograph | 722 | Delay | |
| 7/07/2018 | Pantograph | 722 | Cancellation | T1 |
| 9/07/2018 | Door | 719 | Delay | |
| 9/07/2018 | Pantograph | 722 | Unavailable | Unavailable |
| 10/07/2018 | Passenger | 708 | Unavailable | Unavailable |

| 10/07/2018 | Pantograph | 722 | Unavailable | Unavailable |
|------------|----------------|-----|-------------|---------------|
| 11/07/2018 | Door | 717 | Delay | |
| 11/07/2018 | Pantograph | 722 | Unavailable | Unavailable |
| 12/07/2018 | Unavailable | 710 | Unavailable | Unavailable |
| 12/07/2018 | Sand dispenser | 711 | Unavailable | Unavailable 🧷 |
| 12/07/2018 | Door | 713 | Delay | |
| 12/07/2018 | Door | 723 | Delay | |



Tresulted in non-availability, del