Real Time Ferry
GTFS & GTFS- R Technical Documentation

Version	Date	Author	Reason for Issue / Changes Included
0.5	26/11/2014	TfNSW	Initial version
0.6	16/03/2016	TfNSW	Revised for Open Data
0.7	03/06/2016	TfNSW	Calendar information added

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1. GTFS Bundle Notes

1.1 General Notes

The Sydney Ferries GTFS bundle is sourced directly from Harbour City Ferries FOCIS (Ferry Operational Customer Information System) database. Variations from the Sydney Ferries data available in the Greater Sydney GTFS files are detailed below.

The bundle is generated daily at 05:00 Sydney time. Consumers are advised to update their systems with this data daily (see section 1.4 Calendar)

1.2 Blocking

Blocking allows trips to be linked when performed by the same vessel. Trip IDs will take the form vessel ID_Service ID

1.3 Shapes

Valid shapes are currently not available for ferry data. An enhancement to the FOCIS system is planned to facilitate shape data.

1.4 Calendar

The current export configuration from the FOCIS database only includes timetables that are in operation on the day of generation. For example, a change to a route that necessitates loading of a new timetable in FOCIS - such as special events or changes for summer running - will not be present in advance, and will only appear in the bundle on the day that timetable commences.
This will periodically lead to incorrect or missing data in future dates in the bundle, however the day of publication will always be accurate. For this reason consumers of the data should refresh bundle data daily.

2. Trip updates

2.1 General notes

Trip updates will show predictions based on the FOCIS network. Departure times can also be updated by gate hands at ferry wharfs. Therefore trip updates may still be current even if a ferry has lost GPS signal and is not reporting in the vehicle position feed.

2.2 Schedule Relationship

Wharves that are closed at short notice will have a StopTimeUpdate "schedule_relationship: SKIPPED."

Trips that are cancelled entirely will have a TripDescriptor "schedule_relationship: CANCELLED"

```
header {
  gtfs_realtime_version: "1.0"
  incrementality: FULL_DATASET
  timestamp: 1416287190
}
entity {
  id: "fe552b35-61aa-48ae-97cb-db80779b93a1"
  trip_update {
    trip {
      trip_id: "DH140-1244"
      schedule_relationship: SCHEDULED
      route_id: "DH"
    }
    stop_time_update {
      stop_sequence: 1
      arrival {
        delay: 0
      }
      departure {
        delay: 46
      }
      stop_id: "2000180"
      schedule_relationship: SCHEDULED
    }
    stop_time_update {
      stop_sequence: 2
      arrival {
        delay: 46
      }
      departure {
        delay: 46
      }
      stop_id: "200910"
      schedule_relationship: SCHEDULED
    }
    stop_time_update {
      stop_sequence: 3
      arrival {
        delay: 46
      }
      departure {
        delay: 46
      }
      stop_id: "20414"
      schedule_relationship: SCHEDULED
    }
    stop_time_update {
      stop_sequence: 4
      arrival {
        delay: 46
      }
      departure {
```

```
        delay: 46
      }
      stop_id: "20601"
      schedule_relationship: SCHEDULED
    }
    stop_time_update {
      stop_sequence: 5
      arrival {
        delay: 46
      }
      departure {
        delay: 46
      }
      stop_id: "20611"
      schedule_relationship: SCHEDULED
    }
    stop_time_update {
      stop_sequence: 6
      arrival {
        delay: 46
      }
      departure {
        delay: 46
      }
      stop_id: "20003"
      schedule_relationship: SCHEDULED
    }
    vehicle {
      id: "1006"
      label: "Borrowdale"
    }
    4: 1416287196
  }
}
```

3. Vehicle Position

3.1 Coverage

Vehicle coverage is provided for all Sydney Ferries regular routes. There are known blackspots on the F1 around Bradleys Head and the F3 on parts of the Parramatta River where vessels may lose 3G connectivity.

3.3 Label

Label is currently populated with vessel name. NOTE: This name may not be accurately populated for all future operations. As such it should not be customer facing.

3.4 Example

```
header {
  gtfs_realtime_version: "1.0"
  incrementality: FULL_DATASET
```

```
    timestamp: 1416399579
}
entity {
  id: "4066b3a9-eb89-4a94-8127-760d263b1d2f"
  vehicle {
    trip {
      trip_id: "DH142-1244"
    }
    position {
      latitude: -33.860832
      longitude: 151.2122
      bearing: 194.2
      speed: 0.0
    }
    timestamp: 1416238255
    vehicle {
      id: "1008"
      label: "Fishburn"
    }
  }
}
```

3. Service Alerts

Service alerts are available for incidents such as wharf closures. They contain the same information that is displayed on passenger information displays at wharfs.

```
header {
  gtfs_realtime_version: "1.0"
  incrementality: FULL_DATASET
  timestamp: 1417556490
}
entity {
  id: "7c89fd51-5d30-4f35-a537-aa59b703d14a"
  alert {
    informed_entity {
      agency_id: "SF"
      route_id: "RV"
    }
    url {
      translation {
        text: ""
      }
    }
    header_text {
      translation {
        text: "Parramatta Wharf Closed"
      }
    }
    description_text {
      translation {
        text: "Parramatta Wharf Closed."
      }
    }
  }
}
```