```
SBB Route Time Calculator
Date: 2025-06-17 (Tuesday)
Start time: 04:00
Total routes to process: 54 (27 paths × 2 directions)
_____
Processing Route 1 Split Olten Forward (forward)...
Route: St-Maurice \rightarrow S. Vittore, Zona industriale (31 stations)
  St-Maurice → Renens VD: 04:32-05:34 (62min)
  Renens VD \rightarrow Genève: 05:35-06:21 (46min)
  Genève \rightarrow Renens VD: 06:35-07:07 (32min)
  Renens VD → Neuchâtel: 07:11-07:51 (40min)
  Neuchâtel → Kerzers: 08:04-08:27 (23min)
  Kerzers → Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB \rightarrow Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Aarau: 12:20-12:29 (9min)
  Aarau → Zürich HB: 12:31-12:56 (25min)
  Zürich HB \rightarrow Schaffhausen: 13:05-13:43 (38min)
  Schaffhausen → Romanshorn: 13:49-15:12 (83min)
  Romanshorn \rightarrow St. Gallen: 15:26-15:44 (18min)
  St. Gallen \rightarrow Herisau: 15:44-15:54 (10min)
  Herisau → Jakobsbad: 15:58-16:18 (20min)
  Jakobsbad → Herisau: 16:38-17:00 (22min)
  Herisau → Uznach: 17:13-17:42 (29min)
  Uznach → Ziegelbrücke: 17:46-17:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
  Zug → Luzern: 19:03-19:25 (22min)
  Luzern → Hergiswil NW: 19:27-19:39 (12min)
  Hergiswil NW → Alphachstad: 19:54-19:58 (4min)
  Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
  Hergiswil NW → Altdorf UR: 20:18-21:51 (93min)
  Altdorf UR → Bellinzona: 22:08-22:42 (34min)
  Bellinzona \rightarrow S. Vittore, Zona industriale: 22:50-23:07 (17min)
  Total time: 18 hours 35 minutes (04:32 \rightarrow 23:07)
Results saved to sbb routes progress 1.json
Processing Route 1 Split Olten Reverse (reverse)...
Route: S. Vittore, Zona industriale → St-Maurice (31 stations)
  Bellinzona → Altdorf UR: 05:07-05:50 (43min)
  Altdorf UR → Hergiswil NW: 06:07-07:09 (62min)
  Hergiswil NW \rightarrow Alphachstad: 07:24-07:28 (4min)
  Alphachstad → Hergiswil NW: 07:29-07:33 (4min)
  Hergiswil NW → Luzern: 07:33-07:46 (13min)
  Luzern \rightarrow Zug: 07:51-08:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 08:34-09:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 09:21-09:41 (20min)
  Ziegelbrücke → Uznach: 10:02-10:14 (12min)
  Uznach \rightarrow Herisau: 10:17-10:46 (29min)
  Herisau → Jakobsbad: 10:58-11:18 (20min)
```

```
Jakobsbad → Herisau: 11:38-12:00 (22min)
  Herisau \rightarrow St. Gallen: 12:05-12:14 (9min)
  St. Gallen → Romanshorn: 12:15-12:33 (18min)
  Romanshorn → Schaffhausen: 12:33-13:45 (72min)
  Schaffhausen → Zürich HB: 13:47-14:23 (36min)
  Zürich HB → Aarau: 14:38-15:05 (27min)
  Aarau → Olten: 15:08-15:21 (13min)
  Olten → Liestal: 15:33-15:49 (16min)
  Liestal → Basel SBB: 15:50-16:01 (11min)
  Basel SBB → Laufen, Bahnhof: 16:02-16:41 (39min)
  Laufen, Bahnhof → Delémont: 17:06-17:19 (13min)
  Delémont → Lyss: 17:42-18:30 (48min)
  Lyss \rightarrow Kerzers: 18:35-18:55 (20min)
  Kerzers → Neuchâtel: 19:11-19:28 (17min)
  Neuchâtel → Renens VD: 19:39-20:18 (39min)
  Renens VD \rightarrow Genève: 20:23-20:55 (32min)
  Genève → Renens VD: 21:05-21:53 (48min)
  Renens VD \rightarrow St-Maurice: 21:56-22:53 (57min)
  Total time: 18 hours 16 minutes (04:37 \rightarrow 22:53)
Results saved to sbb routes progress 1.json
Processing Route 2 Split Aarau Forward (forward)...
Route: St-Maurice → S. Vittore, Zona industriale (31 stations)
  St-Maurice → Renens VD: 04:32-05:34 (62min)
  Renens VD \rightarrow Genève: 05:35-06:21 (46min)
  Genève \rightarrow Renens VD: 06:35-07:07 (32min)
  Renens VD → Neuchâtel: 07:11-07:51 (40min)
  Neuchâtel \rightarrow Kerzers: 08:04-08:27 (23min)
  Kerzers → Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB → Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Aarau: 12:20-12:29 (9min)
  Aarau → Zürich HB: 12:31-12:56 (25min)
  Zürich HB → Schaffhausen: 13:05-13:43 (38min)
  Schaffhausen → Romanshorn: 13:49-15:12 (83min)
  Romanshorn \rightarrow St. Gallen: 15:26-15:44 (18min)
  St. Gallen → Herisau: 15:44-15:54 (10min)
  Herisau → Jakobsbad: 15:58-16:18 (20min)
  Jakobsbad → Herisau: 16:38-17:00 (22min)
  Herisau → Uznach: 17:13-17:42 (29min)
  Uznach → Ziegelbrücke: 17:46-17:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
  Zug → Luzern: 19:03-19:25 (22min)
  Luzern → Hergiswil NW: 19:27-19:39 (12min)
  Hergiswil NW → Alphachstad: 19:54-19:58 (4min)
  Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
  Hergiswil NW → Altdorf UR: 20:18-21:51 (93min)
  Altdorf UR → Bellinzona: 22:08-22:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 22:50-23:07 (17min)
  Total time: 18 hours 35 minutes (04:32 \rightarrow 23:07)
```

```
Processing Route 2 Split Aarau Reverse (reverse)...
Route: S. Vittore, Zona industriale → St-Maurice (31 stations)
  Bellinzona → Altdorf UR: 05:07-05:50 (43min)
  Altdorf UR → Hergiswil NW: 06:07-07:09 (62min)
  Hergiswil NW → Alphachstad: 07:24-07:28 (4min)
  Alphachstad → Hergiswil NW: 07:29-07:33 (4min)
  Hergiswil NW → Luzern: 07:33-07:46 (13min)
  Luzern \rightarrow Zug: 07:51-08:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 08:34-09:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 09:21-09:41 (20min)
  Ziegelbrücke → Uznach: 10:02-10:14 (12min)
  Uznach \rightarrow Herisau: 10:17-10:46 (29min)
  Herisau → Jakobsbad: 10:58-11:18 (20min)
  Jakobsbad → Herisau: 11:38-12:00 (22min)
  Herisau \rightarrow St. Gallen: 12:05-12:14 (9min)
  St. Gallen \rightarrow Romanshorn: 12:15-12:33 (18min)
  Romanshorn → Schaffhausen: 12:33-13:45 (72min)
  Schaffhausen → Zürich HB: 13:47-14:23 (36min)
  Zürich HB → Aarau: 14:38-15:05 (27min)
  Aarau → Olten: 15:08-15:21 (13min)
  Olten → Liestal: 15:33-15:49 (16min)
  Liestal \rightarrow Basel SBB: 15:50-16:01 (11min)
  Basel SBB → Laufen, Bahnhof: 16:02-16:41 (39min)
  Laufen, Bahnhof → Delémont: 17:06-17:19 (13min)
  Delémont → Lyss: 17:42-18:30 (48min)
  Lyss \rightarrow Kerzers: 18:35-18:55 (20min)
  Kerzers → Neuchâtel: 19:11-19:28 (17min)
  Neuchâtel → Renens VD: 19:39-20:18 (39min)
  Renens VD \rightarrow Genève: 20:23-20:55 (32min)
  Genève → Renens VD: 21:05-21:53 (48min)
  Renens VD → St-Maurice: 21:56-22:53 (57min)
  Total time: 18 hours 16 minutes (04:37 \rightarrow 22:53)
Results saved to sbb routes progress 2.json
Processing Route 3 Split Zofingen Forward (forward)...
Route: St-Maurice \rightarrow S. Vittore, Zona industriale (32 stations)
  St-Maurice → Renens VD: 04:32-05:34 (62min)
  Renens VD \rightarrow Genève: 05:35-06:21 (46min)
  Genève \rightarrow Renens VD: 06:35-07:07 (32min)
  Renens VD → Neuchâtel: 07:11-07:51 (40min)
  Neuchâtel → Kerzers: 08:04-08:27 (23min)
  Kerzers → Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB → Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Zofingen: 12:12-12:21 (9min)
  Zofingen \rightarrow Luzern: 12:29-13:01 (32min)
  Luzern \rightarrow Hergiswil NW: 13:12-13:23 (11min)
  Hergiswil NW → Alpnachstad: 13:24-13:28 (4min)
```

```
Alphachstad → Hergiswil NW: 13:29-13:33 (4min)
  Hergiswil NW \rightarrow Luzern: 13:33-13:46 (13min)
  Luzern \rightarrow Zug: 13:51-14:21 (30min)
  Zug → Zürich HB: 14:29-14:51 (22min)
  Zürich HB → Schaffhausen: 15:05-15:43 (38min)
  Schaffhausen → Romanshorn: 15:49-17:12 (83min)
  Romanshorn \rightarrow St. Gallen: 17:26-17:44 (18min)
  St. Gallen \rightarrow Herisau: 17:44-17:54 (10min)
  Herisau → Jakobsbad: 17:58-18:18 (20min)
  Jakobsbad → Herisau: 18:38-19:00 (22min)
  Herisau → Uznach: 19:13-19:42 (29min)
  Uznach → Ziegelbrücke: 19:46-19:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 20:00-20:17 (17min)
  Pfäffikon SZ → Altdorf UR: 20:19-21:51 (92min)
  Altdorf UR → Bellinzona: 22:08-22:42 (34min)
  Bellinzona \rightarrow S. Vittore, Zona industriale: 22:50-23:07 (17min)
  Total time: 18 hours 35 minutes (04:32 \rightarrow 23:07)
Results saved to sbb routes progress 3.json
Processing Route 3 Split Zofingen Reverse (reverse)...
Route: S. Vittore, Zona industriale → St-Maurice (32 stations)
  Bellinzona → Altdorf UR: 05:07-05:50 (43min)
  Altdorf UR → Pfäffikon SZ: 05:50-06:54 (64min)
  Pfäffikon SZ → Ziegelbrücke: 07:07-07:25 (18min)
  Ziegelbrücke → Uznach: 07:32-07:45 (13min)
  Uznach \rightarrow Herisau: 07:48-08:23 (35min)
  Herisau → Jakobsbad: 08:28-08:48 (20min)
  Jakobsbad \rightarrow Herisau: 09:08-09:30 (22min)
  Herisau \rightarrow St. Gallen: 09:37-09:47 (10min)
  St. Gallen \rightarrow Romanshorn: 09:49-10:16 (27min)
  Romanshorn → Schaffhausen: 10:18-11:43 (85min)
  Schaffhausen → Zürich HB: 11:47-12:23 (36min)
  Zürich HB → Zug: 12:33-12:59 (26min)
  Zug \rightarrow Luzern: 13:03-13:25 (22min)
  Luzern \rightarrow Hergiswil NW: 13:27-13:39 (12min)
  Hergiswil NW → Alphachstad: 13:54-13:58 (4min)
  Alphachstad → Hergiswil NW: 13:59-14:03 (4min)
  Hergiswil NW → Luzern: 14:03-14:16 (13min)
  Luzern \rightarrow Zofingen: 14:30-15:01 (31min)
  Zofingen \rightarrow Olten: 15:03-15:10 (7min)
  Olten → Liestal: 15:12-15:33 (21min)
  Liestal → Basel SBB: 15:34-15:45 (11min)
  Basel SBB → Laufen, Bahnhof: 15:47-16:26 (39min)
  Laufen, Bahnhof → Delémont: 17:06-17:19 (13min)
  Delémont → Lyss: 17:42-18:30 (48min)
  Lyss \rightarrow Kerzers: 18:35-18:55 (20min)
  Kerzers → Neuchâtel: 19:11-19:28 (17min)
  Neuchâtel → Renens VD: 19:39-20:18 (39min)
  Renens VD \rightarrow Genève: 20:23-20:55 (32min)
  Genève → Renens VD: 21:05-21:53 (48min)
  Renens VD → St-Maurice: 21:56-22:53 (57min)
  Total time: 18 hours 16 minutes (04:37 \rightarrow 22:53)
```

Results saved to sbb routes progress 3.json

```
Processing Route 4 Split Olten Forward (forward)...
Route: Genève → S. Vittore, Zona industriale (31 stations)
  Genève \rightarrow Lausanne: 04:46-05:38 (52min)
  Lausanne → St-Maurice: 05:41-06:23 (42min)
  St-Maurice → Renens VD: 06:28-07:22 (54min)
  Renens VD → Neuchâtel: 07:41-08:21 (40min)
  Neuchâtel → Kerzers: 08:32-08:49 (17min)
  Kerzers \rightarrow Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB → Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Aarau: 12:20-12:29 (9min)
  Aarau → Zürich HB: 12:31-12:56 (25min)
  Zürich HB → Schaffhausen: 13:05-13:43 (38min)
  Schaffhausen → Romanshorn: 13:49-15:12 (83min)
  Romanshorn → St. Gallen: 15:26-15:44 (18min)
  St. Gallen \rightarrow Herisau: 15:44-15:54 (10min)
  Herisau → Jakobsbad: 15:58-16:18 (20min)
  Jakobsbad → Herisau: 16:38-17:00 (22min)
  Herisau → Uznach: 17:13-17:42 (29min)
  Uznach → Ziegelbrücke: 17:46-17:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
  Zug → Luzern: 19:03-19:25 (22min)
  Luzern → Hergiswil NW: 19:27-19:39 (12min)
  Hergiswil NW → Alpnachstad: 19:54-19:58 (4min)
  Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
  Hergiswil NW → Altdorf UR: 20:18-21:51 (93min)
  Altdorf UR → Bellinzona: 22:08-22:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 22:50-23:07 (17min)
  Total time: 18 hours 21 minutes (04:46 \rightarrow 23:07)
Results saved to sbb routes progress 4.json
Processing Route 4 Split Olten Reverse (reverse)...
Route: S. Vittore, Zona industriale → Genève (31 stations)
  Bellinzona → Altdorf UR: 05:07-05:50 (43min)
  Altdorf UR → Hergiswil NW: 06:07-07:09 (62min)
  Hergiswil NW → Alphachstad: 07:24-07:28 (4min)
  Alphachstad → Hergiswil NW: 07:29-07:33 (4min)
  Hergiswil NW → Luzern: 07:33-07:46 (13min)
  Luzern \rightarrow Zug: 07:51-08:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 08:34-09:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 09:21-09:41 (20min)
  Ziegelbrücke → Uznach: 10:02-10:14 (12min)
  Uznach \rightarrow Herisau: 10:17-10:46 (29min)
  Herisau → Jakobsbad: 10:58-11:18 (20min)
  Jakobsbad → Herisau: 11:38-12:00 (22min)
  Herisau \rightarrow St. Gallen: 12:05-12:14 (9min)
  St. Gallen \rightarrow Romanshorn: 12:15-12:33 (18min)
  Romanshorn → Schaffhausen: 12:33-13:45 (72min)
  Schaffhausen → Zürich HB: 13:47-14:23 (36min)
```

```
Zürich HB → Aarau: 14:38-15:05 (27min)
  Aarau → Olten: 15:08-15:21 (13min)
  Olten → Liestal: 15:33-15:49 (16min)
  Liestal → Basel SBB: 15:50-16:01 (11min)
  Basel SBB → Laufen, Bahnhof: 16:02-16:41 (39min)
  Laufen, Bahnhof → Delémont: 17:06-17:19 (13min)
  Delémont → Lyss: 17:42-18:30 (48min)
  Lyss \rightarrow Kerzers: 18:35-18:55 (20min)
  Kerzers → Neuchâtel: 19:11-19:28 (17min)
  Neuchâtel → Renens VD: 19:39-20:18 (39min)
  Renens VD → St-Maurice: 20:24-21:12 (48min)
  St-Maurice → Lausanne: 21:28-22:12 (44min)
  Lausanne \rightarrow Genève: 22:30-23:25 (55min)
  Total time: 18 hours 48 minutes (04:37 \rightarrow 23:25)
Results saved to sbb routes progress 4.json
Processing Route 5 Split Aarau Forward (forward)...
Route: Genève → S. Vittore, Zona industriale (31 stations)
  Genève \rightarrow Lausanne: 04:46-05:38 (52min)
  Lausanne → St-Maurice: 05:41-06:23 (42min)
  St-Maurice → Renens VD: 06:28-07:22 (54min)
  Renens VD → Neuchâtel: 07:41-08:21 (40min)
  Neuchâtel → Kerzers: 08:32-08:49 (17min)
  Kerzers → Lyss: 09:06-09:26 (20min)
  Lyss → Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB \rightarrow Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Aarau: 12:20-12:29 (9min)
  Aarau → Zürich HB: 12:31-12:56 (25min)
  Zürich HB → Schaffhausen: 13:05-13:43 (38min)
  Schaffhausen → Romanshorn: 13:49-15:12 (83min)
  Romanshorn → St. Gallen: 15:26-15:44 (18min)
  St. Gallen \rightarrow Herisau: 15:44-15:54 (10min)
  Herisau → Jakobsbad: 15:58-16:18 (20min)
  Jakobsbad → Herisau: 16:38-17:00 (22min)
  Herisau → Uznach: 17:13-17:42 (29min)
  Uznach → Ziegelbrücke: 17:46-17:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
  Zug → Luzern: 19:03-19:25 (22min)
  Luzern → Hergiswil NW: 19:27-19:39 (12min)
  Hergiswil NW → Alpnachstad: 19:54-19:58 (4min)
  Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
  Hergiswil NW → Altdorf UR: 20:18-21:51 (93min)
  Altdorf UR → Bellinzona: 22:08-22:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 22:50-23:07 (17min)
  Total time: 18 hours 21 minutes (04:46 \rightarrow 23:07)
Results saved to sbb routes progress 5.json
Processing Route 5 Split Aarau Reverse (reverse)...
Route: S. Vittore, Zona industriale → Genève (31 stations)
```

```
Bellinzona → Altdorf UR: 05:07-05:50 (43min)
  Altdorf UR \rightarrow Hergiswil NW: 06:07-07:09 (62min)
  Hergiswil NW → Alphachstad: 07:24-07:28 (4min)
  Alphachstad → Hergiswil NW: 07:29-07:33 (4min)
  Hergiswil NW → Luzern: 07:33-07:46 (13min)
  Luzern \rightarrow Zug: 07:51-08:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 08:34-09:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 09:21-09:41 (20min)
  Ziegelbrücke → Uznach: 10:02-10:14 (12min)
  Uznach \rightarrow Herisau: 10:17-10:46 (29min)
  Herisau → Jakobsbad: 10:58-11:18 (20min)
  Jakobsbad → Herisau: 11:38-12:00 (22min)
  Herisau \rightarrow St. Gallen: 12:05-12:14 (9min)
  St. Gallen \rightarrow Romanshorn: 12:15-12:33 (18min)
  Romanshorn → Schaffhausen: 12:33-13:45 (72min)
  Schaffhausen → Zürich HB: 13:47-14:23 (36min)
  Zürich HB → Aarau: 14:38-15:05 (27min)
  Aarau → Olten: 15:08-15:21 (13min)
  Olten → Liestal: 15:33-15:49 (16min)
  Liestal \rightarrow Basel SBB: 15:50-16:01 (11min)
  Basel SBB → Laufen, Bahnhof: 16:02-16:41 (39min)
  Laufen, Bahnhof → Delémont: 17:06-17:19 (13min)
  Delémont → Lyss: 17:42-18:30 (48min)
 Lyss \rightarrow Kerzers: 18:35-18:55 (20min)
  Kerzers → Neuchâtel: 19:11-19:28 (17min)
  Neuchâtel → Renens VD: 19:39-20:18 (39min)
  Renens VD → St-Maurice: 20:24-21:12 (48min)
  St-Maurice → Lausanne: 21:28-22:12 (44min)
  Lausanne \rightarrow Genève: 22:30-23:25 (55min)
  Total time: 18 hours 48 minutes (04:37 \rightarrow 23:25)
Results saved to sbb routes progress 5.json
_____
ROUTE SUMMARY TABLE
```

______ Route Split Direction End Stations Original Time Actual Time Difference Start Time End Time Route 1 Split Olten Forward Olten forward St-Maurice S. Vittore, Zona industriale 31 755 1115 360 04:32 23:07 Route_1_Split_Olten_Reverse Olten reverse S. Vittore, Zona industriale St-Maurice 31 755 1096 341 04:37 22:53 Route 2 Split Aarau Forward Aarau forward St-Maurice S. Vittore, Zona industriale 31 755 1115 360 04:32 23:07 Route 2 Split Aarau Reverse Aarau reverse S. Vittore, Zona industriale St-Maurice 31 755 1096 341 04:37 22:53 Route_3_Split_Zofingen_Forward Zofingen forward St-Maurice S. Vittore, Zona industriale 762 1115 353 32 04:32 Route_3_Split_Zofingen_Reverse Zofingen reverse S. Vittore, Zona industriale St-Maurice 32 762 1096 334 04:37 22:53

```
Route_4_Split_Olten Forward Olten forward
                                                                    Genève S.
                          31 771 1101
                                                                           04:46
Vittore, Zona industriale
                                                                    330
23:07
  Route 4 Split Olten Reverse Olten reverse S. Vittore, Zona industriale
Genève 31 771 1128 357 04:37 23:25
  Route_5_Split_Aarau_Forward Aarau forward
                                                                   Genève S.
                                           771
                                                       1101
                                                                   330 04:46
Vittore, Zona industriale
                               31
23:07
  Route 5 Split Aarau Reverse Aarau reverse S. Vittore, Zona industriale
Genève 31 771 1128 357 04:37 23:25
_____
_____
Total routes processed: 10
Successful: 10
Failed: 0
Average time difference: 346.3 minutes
Shortest actual route: 1096 minutes
Longest actual route: 1128 minutes
Processing Route 6 Split Olten Forward (forward)...
Route: St-Maurice → Castione-Arbedo (31 stations)
 St-Maurice → Renens VD: 04:32-05:34 (62min)
 Renens VD \rightarrow Genève: 05:35-06:21 (46min)
 Genève \rightarrow Renens VD: 06:35-07:07 (32min)
 Renens VD → Neuchâtel: 07:11-07:51 (40min)
 Neuchâtel → Kerzers: 08:04-08:27 (23min)
 Kerzers → Lyss: 09:06-09:26 (20min)
 Lyss \rightarrow Delémont: 09:30-10:18 (48min)
 Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
 Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
 Basel SBB \rightarrow Liestal: 11:31-11:47 (16min)
 Liestal → Olten: 11:48-12:10 (22min)
 Olten → Aarau: 12:20-12:29 (9min)
 Aarau → Zürich HB: 12:31-12:56 (25min)
 Zürich HB → Schaffhausen: 13:05-13:43 (38min)
 Schaffhausen → Romanshorn: 13:49-15:12 (83min)
 Romanshorn \rightarrow St. Gallen: 15:26-15:44 (18min)
 St. Gallen \rightarrow Herisau: 15:44-15:54 (10min)
 Herisau → Jakobsbad: 15:58-16:18 (20min)
 Jakobsbad → Herisau: 16:38-17:00 (22min)
 Herisau → Uznach: 17:13-17:42 (29min)
 Uznach → Ziegelbrücke: 17:46-17:57 (11min)
 Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
 Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
 Zug → Luzern: 19:03-19:25 (22min)
 Luzern \rightarrow Hergiswil NW: 19:27-19:39 (12min)
 Hergiswil NW → Alpnachstad: 19:54-19:58 (4min)
 Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
 Hergiswil NW \rightarrow Altdorf UR: 20:18-21:51 (93min)
 Altdorf UR → S. Vittore, Zona industriale: 22:08-23:07 (59min)
 S. Vittore, Zona industriale \rightarrow Castione-Arbedo: 23:47-00:00 (13min)
 Total time: 19 hours 28 minutes (04:32 \rightarrow 00:00)
```

Results saved to sbb routes progress 6.json

```
Processing Route 6 Split Olten Reverse (reverse)...
Route: Castione-Arbedo → St-Maurice (31 stations)
  Castione-Arbedo \rightarrow S. Vittore, Zona industriale: 05:58-06:07 (9min)
  S. Vittore, Zona industriale → Altdorf UR: 06:47-07:50 (63min)
  Altdorf UR → Hergiswil NW: 08:07-09:09 (62min)
  Hergiswil NW → Alpnachstad: 09:24-09:28 (4min)
  Alphachstad → Hergiswil NW: 09:29-09:33 (4min)
  Hergiswil NW \rightarrow Luzern: 09:33-09:46 (13min)
  Luzern \rightarrow Zug: 09:51-10:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 10:34-11:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 11:21-11:41 (20min)
  Ziegelbrücke → Uznach: 12:02-12:14 (12min)
  Uznach → Herisau: 12:17-12:46 (29min)
  Herisau → Jakobsbad: 12:58-13:18 (20min)
  Jakobsbad → Herisau: 13:38-14:00 (22min)
  Herisau \rightarrow St. Gallen: 14:05-14:14 (9min)
  St. Gallen \rightarrow Romanshorn: 14:15-14:33 (18min)
  Romanshorn → Schaffhausen: 14:33-15:45 (72min)
  Schaffhausen → Zürich HB: 15:47-16:23 (36min)
  Zürich HB → Aarau: 16:38-17:05 (27min)
  Aarau → Olten: 17:08-17:21 (13min)
  Olten → Liestal: 17:33-17:49 (16min)
  Liestal → Basel SBB: 17:50-18:01 (11min)
  Basel SBB → Laufen, Bahnhof: 18:02-18:41 (39min)
  Laufen, Bahnhof → Delémont: 19:06-19:19 (13min)
  Delémont → Lyss: 19:42-20:30 (48min)
  Lyss → Kerzers: 20:35-20:55 (20min)
  Kerzers → Neuchâtel: 21:11-21:28 (17min)
  Neuchâtel → Renens VD: 21:39-22:18 (39min)
  Renens VD \rightarrow Genève: 22:35-23:25 (50min)
  Genève \rightarrow Renens VD: 23:38-00:23 (45min)
  Renens VD → St-Maurice: 00:26-01:29 (63min)
  Total time: 19 hours 31 minutes (05:58 \rightarrow 01:29)
Results saved to sbb routes progress 6.json
Processing Route 7 Split Aarau Forward (forward)...
Route: St-Maurice → Castione-Arbedo (31 stations)
  St-Maurice → Renens VD: 04:32-05:34 (62min)
  Renens VD \rightarrow Genève: 05:35-06:21 (46min)
  Genève \rightarrow Renens VD: 06:35-07:07 (32min)
  Renens VD → Neuchâtel: 07:11-07:51 (40min)
  Neuchâtel → Kerzers: 08:04-08:27 (23min)
  Kerzers \rightarrow Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB → Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Aarau: 12:20-12:29 (9min)
  Aarau → Zürich HB: 12:31-12:56 (25min)
  Zürich HB → Schaffhausen: 13:05-13:43 (38min)
  Schaffhausen → Romanshorn: 13:49-15:12 (83min)
  Romanshorn \rightarrow St. Gallen: 15:26-15:44 (18min)
```

```
St. Gallen \rightarrow Herisau: 15:44-15:54 (10min)
  Herisau → Jakobsbad: 15:58-16:18 (20min)
  Jakobsbad → Herisau: 16:38-17:00 (22min)
  Herisau → Uznach: 17:13-17:42 (29min)
  Uznach → Ziegelbrücke: 17:46-17:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
  Zug → Luzern: 19:03-19:25 (22min)
  Luzern \rightarrow Hergiswil NW: 19:27-19:39 (12min)
  Hergiswil NW → Alpnachstad: 19:54-19:58 (4min)
  Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
  Hergiswil NW → Altdorf UR: 20:18-21:51 (93min)
  Altdorf UR \rightarrow S. Vittore, Zona industriale: 22:08-23:07 (59min)
  S. Vittore, Zona industriale → Castione-Arbedo: 23:47-00:00 (13min)
  Total time: 19 hours 28 minutes (04:32 \rightarrow 00:00)
Results saved to sbb_routes_progress_7.json
Processing Route 7 Split Aarau Reverse (reverse)...
Route: Castione-Arbedo → St-Maurice (31 stations)
  Castione-Arbedo → S. Vittore, Zona industriale: 05:58-06:07 (9min)
  S. Vittore, Zona industriale \rightarrow Altdorf UR: 06:47-07:50 (63min)
  Altdorf UR → Hergiswil NW: 08:07-09:09 (62min)
  Hergiswil NW → Alpnachstad: 09:24-09:28 (4min)
  Alphachstad → Hergiswil NW: 09:29-09:33 (4min)
  Hergiswil NW → Luzern: 09:33-09:46 (13min)
  Luzern \rightarrow Zug: 09:51-10:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 10:34-11:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 11:21-11:41 (20min)
  Ziegelbrücke → Uznach: 12:02-12:14 (12min)
  Uznach \rightarrow Herisau: 12:17-12:46 (29min)
  Herisau → Jakobsbad: 12:58-13:18 (20min)
  Jakobsbad → Herisau: 13:38-14:00 (22min)
  Herisau \rightarrow St. Gallen: 14:05-14:14 (9min)
  St. Gallen \rightarrow Romanshorn: 14:15-14:33 (18min)
  Romanshorn → Schaffhausen: 14:33-15:45 (72min)
  Schaffhausen → Zürich HB: 15:47-16:23 (36min)
  Zürich HB \rightarrow Aarau: 16:38-17:05 (27min)
  Aarau → Olten: 17:08-17:21 (13min)
  Olten \rightarrow Liestal: 17:33-17:49 (16min)
  Liestal → Basel SBB: 17:50-18:01 (11min)
  Basel SBB → Laufen, Bahnhof: 18:02-18:41 (39min)
  Laufen, Bahnhof → Delémont: 19:06-19:19 (13min)
  Delémont → Lyss: 19:42-20:30 (48min)
  Lyss \rightarrow Kerzers: 20:35-20:55 (20min)
  Kerzers → Neuchâtel: 21:11-21:28 (17min)
  Neuchâtel → Renens VD: 21:39-22:18 (39min)
  Renens VD \rightarrow Genève: 22:35-23:25 (50min)
  Genève \rightarrow Renens VD: 23:38-00:23 (45min)
  Renens VD → St-Maurice: 00:26-01:29 (63min)
  Total time: 19 hours 31 minutes (05:58 \rightarrow 01:29)
Results saved to sbb_routes_progress_7.json
Processing Route 8 Split Olten Forward (forward)...
```

```
Route: St-Maurice → Stein am Rhein (34 stations)
  St-Maurice → Renens VD: 04:32-05:34 (62min)
  Renens VD \rightarrow Genève: 05:35-06:21 (46min)
  Genève \rightarrow Renens VD: 06:35-07:07 (32min)
  Renens VD → Neuchâtel: 07:11-07:51 (40min)
  Neuchâtel → Kerzers: 08:04-08:27 (23min)
  Kerzers \rightarrow Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB → Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten \rightarrow Zofingen: 12:12-12:21 (9min)
  Zofingen \rightarrow Luzern: 12:29-13:01 (32min)
  Luzern → Hergiswil NW: 13:12-13:23 (11min)
  Hergiswil NW → Alpnachstad: 13:24-13:28 (4min)
  Alphachstad → Hergiswil NW: 13:29-13:33 (4min)
  Hergiswil NW \rightarrow Altdorf UR: 13:48-15:17 (89min)
  Altdorf UR → Bellinzona: 16:08-16:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 16:45-17:07 (22min)
  S. Vittore, Zona industriale → Bellinzona: 17:17-17:43 (26min)
  Bellinzona → Altdorf UR: 17:47-19:17 (90min)
  Altdorf UR → Arth-Goldau: 19:39-20:07 (28min)
  Arth-Goldau \rightarrow Zug: 20:15-20:30 (15min)
  Zug → Zürich HB: 20:31-20:55 (24min)
  Zürich HB → Pfäffikon SZ: 21:12-21:39 (27min)
  Pfäffikon SZ → Ziegelbrücke: 21:39-21:58 (19min)
  Ziegelbrücke → Uznach: 22:02-22:14 (12min)
  Uznach \rightarrow Herisau: 22:17-22:46 (29min)
  Herisau → Jakobsbad: 22:58-23:18 (20min)
  Jakobsbad → Herisau: 05:08-05:30 (22min)
  Herisau \rightarrow St. Gallen: 05:37-05:47 (10min)
  St. Gallen \rightarrow Romanshorn: 05:49-06:16 (27min)
  Romanshorn → Stein am Rhein: 06:18-07:13 (55min)
  Total time: 2 hours 41 minutes (04:32 \rightarrow 07:13)
Results saved to sbb routes progress 8.json
Processing Route 8 Split Olten Reverse (reverse)...
Route: Stein am Rhein → St-Maurice (34 stations)
  Stein am Rhein → Romanshorn: 05:13-06:12 (59min)
  Romanshorn → St. Gallen: 06:26-06:44 (18min)
  St. Gallen \rightarrow Herisau: 06:44-06:54 (10min)
  Herisau → Jakobsbad: 06:58-07:18 (20min)
  Jakobsbad → Herisau: 07:38-08:00 (22min)
  Herisau → Uznach: 08:13-08:42 (29min)
  Uznach → Ziegelbrücke: 08:46-08:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 09:00-09:17 (17min)
  Pfäffikon SZ → Zürich HB: 09:19-09:48 (29min)
  Zürich HB → Zug: 10:05-10:29 (24min)
  Zug \rightarrow Arth-Goldau: 10:30-10:45 (15min)
  Arth-Goldau → Altdorf UR: 10:54-11:17 (23min)
  Altdorf UR → Bellinzona: 12:08-12:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 12:50-13:07 (17min)
  S. Vittore, Zona industriale → Bellinzona: 13:17-13:39 (22min)
```

```
Bellinzona → Altdorf UR: 13:47-15:17 (90min)
  Altdorf UR \rightarrow Hergiswil NW: 15:40-16:39 (59min)
  Hergiswil NW → Alphachstad: 16:54-16:58 (4min)
  Alphachstad → Hergiswil NW: 16:59-17:03 (4min)
  Hergiswil NW → Luzern: 17:03-17:16 (13min)
  Luzern → Zofingen: 17:30-18:01 (31min)
  Zofingen \rightarrow Olten: 18:03-18:10 (7min)
  Olten → Liestal: 18:12-18:33 (21min)
  Liestal \rightarrow Basel SBB: 18:34-18:45 (11min)
  Basel SBB → Laufen, Bahnhof: 18:47-19:26 (39min)
  Laufen, Bahnhof → Delémont: 20:06-20:19 (13min)
  Delémont → Lyss: 20:42-21:30 (48min)
  Lyss \rightarrow Kerzers: 21:35-21:55 (20min)
  Kerzers → Neuchâtel: 22:11-22:28 (17min)
  Neuchâtel → Renens VD: 22:39-23:18 (39min)
  Renens VD \rightarrow Genève: 23:25-00:05 (40min)
  Genève → Renens VD: 03:53-04:53 (60min)
  Renens VD \rightarrow St-Maurice: 04:54-05:53 (59min)
  Total time: 0 hours 40 minutes (05:13 \rightarrow 05:53)
Results saved to sbb routes progress 8.json
Processing Route 9 Split Zofingen Forward (forward)...
Route: St-Maurice → Stein am Rhein (34 stations)
  St-Maurice → Renens VD: 04:32-05:34 (62min)
  Renens VD \rightarrow Genève: 05:35-06:21 (46min)
  Genève \rightarrow Renens VD: 06:35-07:07 (32min)
  Renens VD → Neuchâtel: 07:11-07:51 (40min)
  Neuchâtel → Kerzers: 08:04-08:27 (23min)
  Kerzers → Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont \rightarrow Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB → Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Zofingen: 12:12-12:21 (9min)
  Zofingen \rightarrow Luzern: 12:29-13:01 (32min)
  Luzern \rightarrow Hergiswil NW: 13:12-13:23 (11min)
  Hergiswil NW → Alpnachstad: 13:24-13:28 (4min)
  Alphachstad → Hergiswil NW: 13:29-13:33 (4min)
  Hergiswil NW → Altdorf UR: 13:48-15:17 (89min)
  Altdorf UR → Bellinzona: 16:08-16:42 (34min)
  Bellinzona \rightarrow S. Vittore, Zona industriale: 16:45-17:07 (22min)
  S. Vittore, Zona industriale → Bellinzona: 17:17-17:43 (26min)
  Bellinzona → Altdorf UR: 17:47-19:17 (90min)
  Altdorf UR → Arth-Goldau: 19:39-20:07 (28min)
  Arth-Goldau \rightarrow Zug: 20:15-20:30 (15min)
  Zug \rightarrow Zürich HB: 20:31-20:55 (24min)
  Zürich HB → Pfäffikon SZ: 21:12-21:39 (27min)
  Pfäffikon SZ → Ziegelbrücke: 21:39-21:58 (19min)
  Ziegelbrücke → Uznach: 22:02-22:14 (12min)
  Uznach \rightarrow Herisau: 22:17-22:46 (29min)
  Herisau → Jakobsbad: 22:58-23:18 (20min)
  Jakobsbad → Herisau: 05:08-05:30 (22min)
  Herisau \rightarrow St. Gallen: 05:37-05:47 (10min)
```

```
St. Gallen \rightarrow Romanshorn: 05:49-06:16 (27min)
  Romanshorn → Stein am Rhein: 06:18-07:13 (55min)
  Total time: 2 hours 41 minutes (04:32 \rightarrow 07:13)
Results saved to sbb routes progress 9.json
Processing Route 9 Split Zofingen Reverse (reverse)...
Route: Stein am Rhein → St-Maurice (34 stations)
  Stein am Rhein → Romanshorn: 05:13-06:12 (59min)
  Romanshorn → St. Gallen: 06:26-06:44 (18min)
  St. Gallen \rightarrow Herisau: 06:44-06:54 (10min)
  Herisau → Jakobsbad: 06:58-07:18 (20min)
  Jakobsbad → Herisau: 07:38-08:00 (22min)
  Herisau → Uznach: 08:13-08:42 (29min)
  Uznach → Ziegelbrücke: 08:46-08:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 09:00-09:17 (17min)
  Pfäffikon SZ → Zürich HB: 09:19-09:48 (29min)
  Zürich HB → Zug: 10:05-10:29 (24min)
  Zug → Arth-Goldau: 10:30-10:45 (15min)
  Arth-Goldau → Altdorf UR: 10:54-11:17 (23min)
  Altdorf UR → Bellinzona: 12:08-12:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 12:50-13:07 (17min)
  S. Vittore, Zona industriale → Bellinzona: 13:17-13:39 (22min)
  Bellinzona → Altdorf UR: 13:47-15:17 (90min)
  Altdorf UR → Hergiswil NW: 15:40-16:39 (59min)
  Hergiswil NW → Alphachstad: 16:54-16:58 (4min)
  Alphachstad → Hergiswil NW: 16:59-17:03 (4min)
  Hergiswil NW → Luzern: 17:03-17:16 (13min)
  Luzern \rightarrow Zofingen: 17:30-18:01 (31min)
  Zofingen \rightarrow Olten: 18:03-18:10 (7min)
  Olten → Liestal: 18:12-18:33 (21min)
  Liestal → Basel SBB: 18:34-18:45 (11min)
  Basel SBB → Laufen, Bahnhof: 18:47-19:26 (39min)
  Laufen, Bahnhof → Delémont: 20:06-20:19 (13min)
  Delémont → Lyss: 20:42-21:30 (48min)
  Lyss \rightarrow Kerzers: 21:35-21:55 (20min)
  Kerzers → Neuchâtel: 22:11-22:28 (17min)
  Neuchâtel → Renens VD: 22:39-23:18 (39min)
  Renens VD \rightarrow Genève: 23:25-00:05 (40min)
  Genève \rightarrow Renens VD: 03:53-04:53 (60min)
  Renens VD → St-Maurice: 04:54-05:53 (59min)
  Total time: 0 hours 40 minutes (05:13 \rightarrow 05:53)
Results saved to sbb routes progress 9.json
Processing Route 10 Split Zofingen Forward (forward)...
Route: Genève → S. Vittore, Zona industriale (32 stations)
  Genève \rightarrow Lausanne: 04:46-05:38 (52min)
  Lausanne → St-Maurice: 05:41-06:23 (42min)
  St-Maurice → Renens VD: 06:28-07:22 (54min)
  Renens VD → Neuchâtel: 07:41-08:21 (40min)
  Neuchâtel → Kerzers: 08:32-08:49 (17min)
  Kerzers \rightarrow Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
```

```
Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB \rightarrow Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten \rightarrow Zofingen: 12:12-12:21 (9min)
  Zofingen \rightarrow Luzern: 12:29-13:01 (32min)
  Luzern → Hergiswil NW: 13:12-13:23 (11min)
  Hergiswil NW → Alpnachstad: 13:24-13:28 (4min)
  Alphachstad → Hergiswil NW: 13:29-13:33 (4min)
  Hergiswil NW \rightarrow Luzern: 13:33-13:46 (13min)
  Luzern \rightarrow Zug: 13:51-14:21 (30min)
  Zug → Zürich HB: 14:29-14:51 (22min)
  Zürich HB → Schaffhausen: 15:05-15:43 (38min)
  Schaffhausen → Romanshorn: 15:49-17:12 (83min)
  Romanshorn → St. Gallen: 17:26-17:44 (18min)
  St. Gallen \rightarrow Herisau: 17:44-17:54 (10min)
  Herisau → Jakobsbad: 17:58-18:18 (20min)
  Jakobsbad → Herisau: 18:38-19:00 (22min)
  Herisau → Uznach: 19:13-19:42 (29min)
  Uznach → Ziegelbrücke: 19:46-19:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 20:00-20:17 (17min)
  Pfäffikon SZ → Altdorf UR: 20:19-21:51 (92min)
  Altdorf UR → Bellinzona: 22:08-22:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 22:50-23:07 (17min)
  Total time: 18 hours 21 minutes (04:46 \rightarrow 23:07)
Results saved to sbb routes progress 10.json
Processing Route 10 Split Zofingen Reverse (reverse)...
Route: S. Vittore, Zona industriale → Genève (32 stations)
  Bellinzona → Altdorf UR: 05:07-05:50 (43min)
  Altdorf UR → Pfäffikon SZ: 05:50-06:54 (64min)
 Pfäffikon SZ → Ziegelbrücke: 07:07-07:25 (18min)
  Ziegelbrücke → Uznach: 07:32-07:45 (13min)
  Uznach \rightarrow Herisau: 07:48-08:23 (35min)
  Herisau → Jakobsbad: 08:28-08:48 (20min)
  Jakobsbad → Herisau: 09:08-09:30 (22min)
  Herisau \rightarrow St. Gallen: 09:37-09:47 (10min)
  St. Gallen \rightarrow Romanshorn: 09:49-10:16 (27min)
  Romanshorn → Schaffhausen: 10:18-11:43 (85min)
  Schaffhausen → Zürich HB: 11:47-12:23 (36min)
  Zürich HB → Zug: 12:33-12:59 (26min)
  Zug → Luzern: 13:03-13:25 (22min)
  Luzern → Hergiswil NW: 13:27-13:39 (12min)
  Hergiswil NW → Alphachstad: 13:54-13:58 (4min)
  Alphachstad → Hergiswil NW: 13:59-14:03 (4min)
  Hergiswil NW → Luzern: 14:03-14:16 (13min)
  Luzern \rightarrow Zofingen: 14:30-15:01 (31min)
  Zofingen \rightarrow Olten: 15:03-15:10 (7min)
  Olten → Liestal: 15:12-15:33 (21min)
  Liestal → Basel SBB: 15:34-15:45 (11min)
  Basel SBB → Laufen, Bahnhof: 15:47-16:26 (39min)
  Laufen, Bahnhof → Delémont: 17:06-17:19 (13min)
  Delémont → Lyss: 17:42-18:30 (48min)
  Lyss \rightarrow Kerzers: 18:35-18:55 (20min)
  Kerzers → Neuchâtel: 19:11-19:28 (17min)
```

Neuchâtel \rightarrow Renens VD: 19:39-20:18 (39min) Renens VD \rightarrow St-Maurice: 20:24-21:12 (48min) St-Maurice \rightarrow Lausanne: 21:28-22:12 (44min) Lausanne \rightarrow Genève: 22:30-23:25 (55min)

Total time: 18 hours 48 minutes $(04:37 \rightarrow 23:25)$

Results saved to sbb_routes_progress_10.json

ROUTE SUMMARY TABLE

	=======			
=========				
Route	Split D	irection		Start
End Stations Original Time A	ctual Time	Difference S	Start Time En	d Time
Route_1_Split_Olten_Forward Vittore, Zona industriale	Olten	forward		St-Maurice S.
Vittore, Zona industriale	31	755	1115	360 04:32
23:07				
Route_1_Split_Olten_Reverse	Olten	reverse S. V	Vittore, Zona	industriale
			341 0	
Route_2_Split_Aarau_Forward	Aarau	forward		St-Maurice S.
Route_2_Split_Aarau_Forward Vittore, Zona industriale	31	755	1115	360 04:32
23:07				
Route 2 Split Aarau Reverse	Aarau	reverse S. V	Vittore, Zona	industriale
St-Maurice 31	755	1096	341 0	4:37 22:53
Route 3 Split Zofingen Forward	Zofingen	forward		St-Maurice S.
Vittore, Zona industriale	32	762	1115	353 04:32
23:07				
Route_3_Split_Zofingen_Reverse	Zofingen	reverse S. V	Vittore, Zona	industriale
Route_3_Split_Zofingen_Reverse St-Maurice 32	762	1096	334 0	4:37 22:53
Route 4 Split Olten Forward	Olten	forward		Genève S.
Vittore, Zona industriale	31	771	1101	330 04:46
23:07				
Route_4_Split_Olten_Reverse	Olten	reverse S. V	Vittore, Zona	industriale
	11		57 04:37	
Route_5_Split_Aarau_Forward	Aarau	forward		Genève S.
Vittore, Zona industriale			1101	330 04:46
23:07				
Route_5_Split_Aarau_Reverse	Aarau	reverse S. V	Vittore, Zona	industriale
Genève 31 771 Route_6_Split_Olten_Forward Castione-Arbedo 31	11	28 35	57 04:37	23:25
Route_6_Split_Olten_Forward	Olten	forward		St-Maurice
Castione-Arbedo 31	772	1168	396	04:32 00:00
Route_6_Split_Olten_Reverse	Olten	reverse	Cas	tione-Arbedo
Route_6_Split_Olten_Reverse St-Maurice 31	772	1171	399 0	5:58 01:29
Route 7 Split Aarau Forward	Aarau	forward		St-Maurice
Castione-Arbedo 31	772	1168	396	04:32 00:00
Route_7_Split_Aarau_Reverse	Aarau	reverse	Cas	tione-Arbedo
St-Maurice 31	772	1171	399 0	5:58 01:29
Route_8_Split_Olten_Forward	Olten	forward		tione-Arbedo 5:58 01:29 St-Maurice
Stein am Rhein 34	777	161	-616	04:32 07:13
Route_8_Split_Olten_Reverse	Olten	reverse	St	ein am Rhein
St-Maurice 34	777	40		5:13 05:53
Route_9_Split_Zofingen_Forward				St-Maurice 04:32 07:13
Stein am Rhein 34	777	161	-616	04:32 07:13

```
Route_9_Split_Zofingen_Reverse Zofingen reverse Stein am Rhein St-Maurice 34 777 40 -737 05:13 05:53
St-Maurice 34
                                                               05:13 05:53
Route 10 Split Zofingen_Forward Zofingen forward
                                                                       Genève S.
Vittore, Zona industriale
                           32 778
                                                         1101
                                                                      323 04:46
Route_10_Split_Zofingen_Reverse Zofingen reverse S. Vittore, Zona industriale
Genève 32 778 1128 350 04:37
______
_____
Total routes processed: 20
Successful: 20
Failed: 0
Average time difference: 151.0 minutes
Shortest actual route: 40 minutes
Longest actual route: 1171 minutes
Processing Route 11 Split Zofingen Forward (forward)...
Route: St-Maurice → Castione-Arbedo (32 stations)
 St-Maurice → Renens VD: 04:32-05:34 (62min)
 Renens VD \rightarrow Genève: 05:35-06:21 (46min)
 Genève \rightarrow Renens VD: 06:35-07:07 (32min)
 Renens VD → Neuchâtel: 07:11-07:51 (40min)
 Neuchâtel → Kerzers: 08:04-08:27 (23min)
 Kerzers → Lyss: 09:06-09:26 (20min)
 Lyss → Delémont: 09:30-10:18 (48min)
 Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
 Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
 Basel SBB → Liestal: 11:31-11:47 (16min)
 Liestal → Olten: 11:48-12:10 (22min)
 Olten → Zofingen: 12:12-12:21 (9min)
 Zofingen \rightarrow Luzern: 12:29-13:01 (32min)
 Luzern → Hergiswil NW: 13:12-13:23 (11min)
 Hergiswil NW → Alphachstad: 13:24-13:28 (4min)
 Alphachstad → Hergiswil NW: 13:29-13:33 (4min)
 Hergiswil NW → Luzern: 13:33-13:46 (13min)
 Luzern \rightarrow Zug: 13:51-14:21 (30min)
 Zug \rightarrow Zürich HB: 14:29-14:51 (22min)
 Zürich HB → Schaffhausen: 15:05-15:43 (38min)
 Schaffhausen → Romanshorn: 15:49-17:12 (83min)
 Romanshorn → St. Gallen: 17:26-17:44 (18min)
 St. Gallen \rightarrow Herisau: 17:44-17:54 (10min)
 Herisau → Jakobsbad: 17:58-18:18 (20min)
 Jakobsbad → Herisau: 18:38-19:00 (22min)
 Herisau → Uznach: 19:13-19:42 (29min)
 Uznach → Ziegelbrücke: 19:46-19:57 (11min)
 Ziegelbrücke → Pfäffikon SZ: 20:00-20:17 (17min)
 Pfäffikon SZ → Altdorf UR: 20:19-21:51 (92min)
 Altdorf UR \rightarrow S. Vittore, Zona industriale: 22:08-23:07 (59min)
 S. Vittore, Zona industriale \rightarrow Castione-Arbedo: 23:47-00:00 (13min)
 Total time: 19 hours 28 minutes (04:32 \rightarrow 00:00)
Results saved to sbb routes progress 11.json
```

Processing Route 11 Split Zofingen Reverse (reverse)...

```
Route: Castione-Arbedo → St-Maurice (32 stations)
  Castione-Arbedo → S. Vittore, Zona industriale: 05:58-06:07 (9min)
  S. Vittore, Zona industriale → Altdorf UR: 06:47-07:50 (63min)
  Altdorf UR → Pfäffikon SZ: 07:50-08:54 (64min)
  Pfäffikon SZ → Ziegelbrücke: 09:07-09:25 (18min)
  Ziegelbrücke → Uznach: 09:32-09:45 (13min)
  Uznach \rightarrow Herisau: 09:48-10:23 (35min)
  Herisau → Jakobsbad: 10:28-10:48 (20min)
  Jakobsbad → Herisau: 11:08-11:30 (22min)
  Herisau \rightarrow St. Gallen: 11:37-11:47 (10min)
  St. Gallen \rightarrow Romanshorn: 11:49-12:16 (27min)
  Romanshorn → Schaffhausen: 12:18-13:43 (85min)
  Schaffhausen → Zürich HB: 13:47-14:23 (36min)
  Zürich HB → Zug: 14:33-14:59 (26min)
  Zug \rightarrow Luzern: 15:03-15:25 (22min)
  Luzern → Hergiswil NW: 15:27-15:39 (12min)
  Hergiswil NW → Alpnachstad: 15:54-15:58 (4min)
  Alphachstad → Hergiswil NW: 15:59-16:03 (4min)
  Hergiswil NW → Luzern: 16:03-16:16 (13min)
  Luzern \rightarrow Zofingen: 16:30-17:01 (31min)
  Zofingen \rightarrow Olten: 17:03-17:10 (7min)
  Olten → Liestal: 17:12-17:33 (21min)
  Liestal → Basel SBB: 17:34-17:45 (11min)
  Basel SBB → Laufen, Bahnhof: 17:47-18:26 (39min)
  Laufen, Bahnhof → Delémont: 19:06-19:19 (13min)
  Delémont → Lyss: 19:42-20:30 (48min)
  Lyss \rightarrow Kerzers: 20:35-20:55 (20min)
  Kerzers → Neuchâtel: 21:11-21:28 (17min)
  Neuchâtel → Renens VD: 21:39-22:18 (39min)
  Renens VD \rightarrow Genève: 22:35-23:25 (50min)
  Genève \rightarrow Renens VD: 23:38-00:23 (45min)
  Renens VD → St-Maurice: 00:26-01:29 (63min)
  Total time: 19 hours 31 minutes (05:58 \rightarrow 01:29)
Results saved to sbb routes progress 11.json
Processing Route 12 Split Aarau Forward (forward)...
Route: St-Maurice → Bellinzona (31 stations)
  St-Maurice → Renens VD: 04:32-05:34 (62min)
  Renens VD \rightarrow Genève: 05:35-06:21 (46min)
  Genève \rightarrow Renens VD: 06:35-07:07 (32min)
  Renens VD → Neuchâtel: 07:11-07:51 (40min)
  Neuchâtel → Kerzers: 08:04-08:27 (23min)
  Kerzers \rightarrow Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof \rightarrow Basel SBB: 10:45-11:21 (36min)
  Basel SBB \rightarrow Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Aarau: 12:20-12:29 (9min)
  Aarau → Zürich HB: 12:31-12:56 (25min)
  Zürich HB → Schaffhausen: 13:05-13:43 (38min)
  Schaffhausen → Romanshorn: 13:49-15:12 (83min)
  Romanshorn \rightarrow St. Gallen: 15:26-15:44 (18min)
  St. Gallen \rightarrow Herisau: 15:44-15:54 (10min)
```

```
Herisau → Jakobsbad: 15:58-16:18 (20min)
  Jakobsbad → Herisau: 16:38-17:00 (22min)
  Herisau → Uznach: 17:13-17:42 (29min)
  Uznach → Ziegelbrücke: 17:46-17:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
  Zug → Luzern: 19:03-19:25 (22min)
  Luzern → Hergiswil NW: 19:27-19:39 (12min)
  Hergiswil NW → Alphachstad: 19:54-19:58 (4min)
  Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
  Hergiswil NW → Altdorf UR: 20:18-21:51 (93min)
  Altdorf UR → S. Vittore, Zona industriale: 22:08-23:07 (59min)
  S. Vittore, Zona industriale \rightarrow Bellinzona: 23:47-00:11 (24min)
  Total time: 19 hours 39 minutes (04:32 \rightarrow 00:11)
Results saved to sbb routes progress 12.json
Processing Route 12 Split Aarau Reverse (reverse)...
Route: Bellinzona → St-Maurice (31 stations)
  Bellinzona → S. Vittore, Zona industriale: 05:41-06:07 (26min)
  S. Vittore, Zona industriale → Altdorf UR: 06:47-07:50 (63min)
  Altdorf UR → Hergiswil NW: 08:07-09:09 (62min)
  Hergiswil NW → Alpnachstad: 09:24-09:28 (4min)
  Alphachstad → Hergiswil NW: 09:29-09:33 (4min)
  Hergiswil NW → Luzern: 09:33-09:46 (13min)
  Luzern \rightarrow Zug: 09:51-10:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 10:34-11:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 11:21-11:41 (20min)
  Ziegelbrücke → Uznach: 12:02-12:14 (12min)
  Uznach → Herisau: 12:17-12:46 (29min)
  Herisau → Jakobsbad: 12:58-13:18 (20min)
  Jakobsbad → Herisau: 13:38-14:00 (22min)
  Herisau \rightarrow St. Gallen: 14:05-14:14 (9min)
  St. Gallen \rightarrow Romanshorn: 14:15-14:33 (18min)
  Romanshorn → Schaffhausen: 14:33-15:45 (72min)
  Schaffhausen → Zürich HB: 15:47-16:23 (36min)
  Zürich HB → Aarau: 16:38-17:05 (27min)
  Aarau → Olten: 17:08-17:21 (13min)
  Olten → Liestal: 17:33-17:49 (16min)
  Liestal \rightarrow Basel SBB: 17:50-18:01 (11min)
  Basel SBB → Laufen, Bahnhof: 18:02-18:41 (39min)
  Laufen, Bahnhof → Delémont: 19:06-19:19 (13min)
  Delémont → Lyss: 19:42-20:30 (48min)
  Lyss → Kerzers: 20:35-20:55 (20min)
  Kerzers → Neuchâtel: 21:11-21:28 (17min)
  Neuchâtel → Renens VD: 21:39-22:18 (39min)
  Renens VD \rightarrow Genève: 22:35-23:25 (50min)
  Genève \rightarrow Renens VD: 23:38-00:23 (45min)
  Renens VD → St-Maurice: 00:26-01:29 (63min)
  Total time: 19 hours 48 minutes (05:41 \rightarrow 01:29)
Results saved to sbb routes progress 12.json
Processing Route 13 Split Olten Forward (forward)...
Route: Genève → Castione-Arbedo (31 stations)
```

```
Genève \rightarrow Lausanne: 04:46-05:38 (52min)
  Lausanne → St-Maurice: 05:41-06:23 (42min)
  St-Maurice → Renens VD: 06:28-07:22 (54min)
  Renens VD → Neuchâtel: 07:41-08:21 (40min)
  Neuchâtel → Kerzers: 08:32-08:49 (17min)
  Kerzers → Lyss: 09:06-09:26 (20min)
  Lyss → Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB → Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Aarau: 12:20-12:29 (9min)
  Aarau → Zürich HB: 12:31-12:56 (25min)
  Zürich HB → Schaffhausen: 13:05-13:43 (38min)
  Schaffhausen → Romanshorn: 13:49-15:12 (83min)
  Romanshorn → St. Gallen: 15:26-15:44 (18min)
  St. Gallen \rightarrow Herisau: 15:44-15:54 (10min)
  Herisau → Jakobsbad: 15:58-16:18 (20min)
  Jakobsbad → Herisau: 16:38-17:00 (22min)
  Herisau → Uznach: 17:13-17:42 (29min)
  Uznach → Ziegelbrücke: 17:46-17:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
  Zug \rightarrow Luzern: 19:03-19:25 (22min)
  Luzern \rightarrow Hergiswil NW: 19:27-19:39 (12min)
  Hergiswil NW → Alphachstad: 19:54-19:58 (4min)
  Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
  Hergiswil NW → Altdorf UR: 20:18-21:51 (93min)
  Altdorf UR \rightarrow S. Vittore, Zona industriale: 22:08-23:07 (59min)
  S. Vittore, Zona industriale → Castione-Arbedo: 23:47-00:00 (13min)
  Total time: 19 hours 14 minutes (04:46 \rightarrow 00:00)
Results saved to sbb routes progress 13.json
Processing Route 13 Split Olten Reverse (reverse)...
Route: Castione-Arbedo → Genève (31 stations)
  Castione-Arbedo → S. Vittore, Zona industriale: 05:58-06:07 (9min)
  S. Vittore, Zona industriale \rightarrow Altdorf UR: 06:47-07:50 (63min)
  Altdorf UR → Hergiswil NW: 08:07-09:09 (62min)
  Hergiswil NW → Alpnachstad: 09:24-09:28 (4min)
  Alphachstad → Hergiswil NW: 09:29-09:33 (4min)
  Hergiswil NW → Luzern: 09:33-09:46 (13min)
  Luzern \rightarrow Zug: 09:51-10:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 10:34-11:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 11:21-11:41 (20min)
  Ziegelbrücke → Uznach: 12:02-12:14 (12min)
  Uznach \rightarrow Herisau: 12:17-12:46 (29min)
  Herisau → Jakobsbad: 12:58-13:18 (20min)
  Jakobsbad → Herisau: 13:38-14:00 (22min)
  Herisau \rightarrow St. Gallen: 14:05-14:14 (9min)
  St. Gallen \rightarrow Romanshorn: 14:15-14:33 (18min)
  Romanshorn → Schaffhausen: 14:33-15:45 (72min)
  Schaffhausen → Zürich HB: 15:47-16:23 (36min)
  Zürich HB \rightarrow Aarau: 16:38-17:05 (27min)
  Aarau → Olten: 17:08-17:21 (13min)
```

```
Olten → Liestal: 17:33-17:49 (16min)
  Liestal \rightarrow Basel SBB: 17:50-18:01 (11min)
  Basel SBB → Laufen, Bahnhof: 18:02-18:41 (39min)
  Laufen, Bahnhof \rightarrow Delémont: 19:06-19:19 (13min)
  Delémont → Lyss: 19:42-20:30 (48min)
  Lyss \rightarrow Kerzers: 20:35-20:55 (20min)
  Kerzers → Neuchâtel: 21:11-21:28 (17min)
  Neuchâtel → Renens VD: 21:39-22:18 (39min)
  Renens VD → St-Maurice: 22:26-23:27 (61min)
  St-Maurice → Lausanne: 23:32-00:15 (43min)
  Lausanne \rightarrow Genève: 00:30-01:22 (52min)
  Total time: 19 hours 24 minutes (05:58 \rightarrow 01:22)
Results saved to sbb routes progress 13.json
Processing Route 14 Split Aarau Forward (forward)...
Route: Genève → Castione-Arbedo (31 stations)
  Genève \rightarrow Lausanne: 04:46-05:38 (52min)
  Lausanne → St-Maurice: 05:41-06:23 (42min)
  St-Maurice → Renens VD: 06:28-07:22 (54min)
  Renens VD → Neuchâtel: 07:41-08:21 (40min)
  Neuchâtel → Kerzers: 08:32-08:49 (17min)
  Kerzers → Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB \rightarrow Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Aarau: 12:20-12:29 (9min)
  Aarau → Zürich HB: 12:31-12:56 (25min)
  Zürich HB \rightarrow Schaffhausen: 13:05-13:43 (38min)
  Schaffhausen → Romanshorn: 13:49-15:12 (83min)
  Romanshorn \rightarrow St. Gallen: 15:26-15:44 (18min)
  St. Gallen \rightarrow Herisau: 15:44-15:54 (10min)
  Herisau → Jakobsbad: 15:58-16:18 (20min)
  Jakobsbad → Herisau: 16:38-17:00 (22min)
  Herisau → Uznach: 17:13-17:42 (29min)
  Uznach → Ziegelbrücke: 17:46-17:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
  Zug → Luzern: 19:03-19:25 (22min)
  Luzern → Hergiswil NW: 19:27-19:39 (12min)
  Hergiswil NW → Alphachstad: 19:54-19:58 (4min)
  Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
  Hergiswil NW → Altdorf UR: 20:18-21:51 (93min)
  Altdorf UR \rightarrow S. Vittore, Zona industriale: 22:08-23:07 (59min)
  S. Vittore, Zona industriale \rightarrow Castione-Arbedo: 23:47-00:00 (13min)
  Total time: 19 hours 14 minutes (04:46 \rightarrow 00:00)
Results saved to sbb routes progress 14.json
Processing Route 14 Split Aarau Reverse (reverse)...
Route: Castione-Arbedo → Genève (31 stations)
  Castione-Arbedo → S. Vittore, Zona industriale: 05:58-06:07 (9min)
  S. Vittore, Zona industriale → Altdorf UR: 06:47-07:50 (63min)
```

```
Altdorf UR → Hergiswil NW: 08:07-09:09 (62min)
  Hergiswil NW → Alpnachstad: 09:24-09:28 (4min)
  Alphachstad → Hergiswil NW: 09:29-09:33 (4min)
  Hergiswil NW \rightarrow Luzern: 09:33-09:46 (13min)
  Luzern \rightarrow Zug: 09:51-10:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 10:34-11:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 11:21-11:41 (20min)
  Ziegelbrücke → Uznach: 12:02-12:14 (12min)
  Uznach \rightarrow Herisau: 12:17-12:46 (29min)
  Herisau → Jakobsbad: 12:58-13:18 (20min)
  Jakobsbad → Herisau: 13:38-14:00 (22min)
  Herisau \rightarrow St. Gallen: 14:05-14:14 (9min)
  St. Gallen \rightarrow Romanshorn: 14:15-14:33 (18min)
  Romanshorn → Schaffhausen: 14:33-15:45 (72min)
  Schaffhausen → Zürich HB: 15:47-16:23 (36min)
  Zürich HB → Aarau: 16:38-17:05 (27min)
  Aarau → Olten: 17:08-17:21 (13min)
  Olten → Liestal: 17:33-17:49 (16min)
  Liestal → Basel SBB: 17:50-18:01 (11min)
  Basel SBB → Laufen, Bahnhof: 18:02-18:41 (39min)
  Laufen, Bahnhof → Delémont: 19:06-19:19 (13min)
  Delémont \rightarrow Lyss: 19:42-20:30 (48min)
  Lyss \rightarrow Kerzers: 20:35-20:55 (20min)
  Kerzers → Neuchâtel: 21:11-21:28 (17min)
  Neuchâtel → Renens VD: 21:39-22:18 (39min)
  Renens VD → St-Maurice: 22:26-23:27 (61min)
  St-Maurice → Lausanne: 23:32-00:15 (43min)
  Lausanne \rightarrow Genève: 00:30-01:22 (52min)
  Total time: 19 hours 24 minutes (05:58 \rightarrow 01:22)
Results saved to sbb_routes_progress_14.json
Processing Route 15 Split Olten Forward (forward)...
Route: Genève → Stein am Rhein (34 stations)
  Genève \rightarrow Lausanne: 04:46-05:38 (52min)
  Lausanne → St-Maurice: 05:41-06:23 (42min)
  St-Maurice → Renens VD: 06:28-07:22 (54min)
  Renens VD → Neuchâtel: 07:41-08:21 (40min)
  Neuchâtel → Kerzers: 08:32-08:49 (17min)
  Kerzers \rightarrow Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB \rightarrow Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Zofingen: 12:12-12:21 (9min)
  Zofingen \rightarrow Luzern: 12:29-13:01 (32min)
  Luzern \rightarrow Hergiswil NW: 13:12-13:23 (11min)
  Hergiswil NW → Alphachstad: 13:24-13:28 (4min)
  Alphachstad \rightarrow Hergiswil NW: 13:29-13:33 (4min)
  Hergiswil NW → Altdorf UR: 13:48-15:17 (89min)
  Altdorf UR → Bellinzona: 16:08-16:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 16:45-17:07 (22min)
  S. Vittore, Zona industriale \rightarrow Bellinzona: 17:17-17:43 (26min)
  Bellinzona → Altdorf UR: 17:47-19:17 (90min)
```

```
Altdorf UR → Arth-Goldau: 19:39-20:07 (28min)
  Arth-Goldau \rightarrow Zug: 20:15-20:30 (15min)
  Zug → Zürich HB: 20:31-20:55 (24min)
  Zürich HB → Pfäffikon SZ: 21:12-21:39 (27min)
  Pfäffikon SZ → Ziegelbrücke: 21:39-21:58 (19min)
  Ziegelbrücke → Uznach: 22:02-22:14 (12min)
  Uznach → Herisau: 22:17-22:46 (29min)
  Herisau → Jakobsbad: 22:58-23:18 (20min)
  Jakobsbad → Herisau: 05:08-05:30 (22min)
  Herisau \rightarrow St. Gallen: 05:37-05:47 (10min)
  St. Gallen \rightarrow Romanshorn: 05:49-06:16 (27min)
  Romanshorn → Stein am Rhein: 06:18-07:13 (55min)
  Total time: 2 hours 27 minutes (04:46 \rightarrow 07:13)
Results saved to sbb_routes_progress_15.json
Processing Route_15_Split_Olten_Reverse (reverse)...
Route: Stein am Rhein \rightarrow Genève (34 stations)
  Stein am Rhein → Romanshorn: 05:13-06:12 (59min)
  Romanshorn \rightarrow St. Gallen: 06:26-06:44 (18min)
  St. Gallen \rightarrow Herisau: 06:44-06:54 (10min)
  Herisau → Jakobsbad: 06:58-07:18 (20min)
  Jakobsbad → Herisau: 07:38-08:00 (22min)
  Herisau → Uznach: 08:13-08:42 (29min)
  Uznach → Ziegelbrücke: 08:46-08:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 09:00-09:17 (17min)
  Pfäffikon SZ → Zürich HB: 09:19-09:48 (29min)
  Zürich HB → Zug: 10:05-10:29 (24min)
  Zug \rightarrow Arth-Goldau: 10:30-10:45 (15min)
  Arth-Goldau → Altdorf UR: 10:54-11:17 (23min)
  Altdorf UR → Bellinzona: 12:08-12:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 12:50-13:07 (17min)
  S. Vittore, Zona industriale → Bellinzona: 13:17-13:39 (22min)
  Bellinzona → Altdorf UR: 13:47-15:17 (90min)
  Altdorf UR → Hergiswil NW: 15:40-16:39 (59min)
  Hergiswil NW → Alphachstad: 16:54-16:58 (4min)
  Alphachstad → Hergiswil NW: 16:59-17:03 (4min)
  Hergiswil NW \rightarrow Luzern: 17:03-17:16 (13min)
  Luzern → Zofingen: 17:30-18:01 (31min)
  Zofingen \rightarrow Olten: 18:03-18:10 (7min)
  Olten → Liestal: 18:12-18:33 (21min)
  Liestal → Basel SBB: 18:34-18:45 (11min)
  Basel SBB → Laufen, Bahnhof: 18:47-19:26 (39min)
  Laufen, Bahnhof → Delémont: 20:06-20:19 (13min)
  Delémont → Lyss: 20:42-21:30 (48min)
  Lyss \rightarrow Kerzers: 21:35-21:55 (20min)
  Kerzers → Neuchâtel: 22:11-22:28 (17min)
  Neuchâtel → Renens VD: 22:39-23:18 (39min)
  Renens VD → St-Maurice: 23:26-00:27 (61min)
  St-Maurice → Lausanne: 04:32-05:27 (55min)
  Lausanne \rightarrow Genève: 05:30-06:21 (51min)
  Total time: 1 hours 8 minutes (05:13 \rightarrow 06:21)
```

Results saved to sbb_routes_progress_15.json

=========				
ROUTE SUMMARY TABLE				
			========	=======================================
Pouto	Colit I	iroation		Start
End Stations Original Time A	Split I		Ctoxt Himo En	
Route_1_Split_Olten_Forward		Difference	Start Time En	
Vittore, Zona industriale		755	1115	St-Maurice S. 360 04:32
23:07) I	755	1113	300 04.32
Route 1 Split Olten Reverse	01+on	roverse S	Wittoro Zona	industrialo
St-Maurice 31			341 0	
Route_2_Split_Aarau_Forward				St-Maurice S.
Vittore, Zona industriale	71	755	1115	
23:07	31	755	1113	300 04.32
Route 2 Split Aarau Reverse	70001	7	17:++ono 7ono	industrials
St-Maurice 31				
			341 0	
Route_3_Split_Zofingen_Forward	ZOTTIIGEII	TOTWATO	1115	St-Maurice S.
Vittore, Zona industriale	32	162	1115	353 04:32
23:07	R - 61		77.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.	An Arrabada La
Route_3_Split_Zofingen_Reverse				
St-Maurice 32	762	1096	334 0	
<pre>Route_4_Split_Olten_Forward Vittore, Zona industriale</pre>	Olten	forward	1101	Genève S.
Vittore, Zona industriale 23:07	31	//1	1101	330 04:46
Route_4_Split_Olten_Reverse Genève 31 771	Olten	reverse S.	Vittore, Zona	industriale
Genève 31 771	11	.28	357 04:37	23:25
Route_5_Split_Aarau_Forward Vittore, Zona industriale	31	771	1101	330 04:46
23:07				
Route_5_Split_Aarau_Reverse	Aarau	reverse S.	Vittore, Zona	industriale
Genève 31 771			357 04:37	23:25
Route_6_Split_Olten_Forward				St-Maurice
Castione-Arbedo 31	772	1168	396	04:32 00:00
Route_6_Split_Olten_Reverse	Olten	reverse	Cas	tione-Arbedo
St-Maurice 31	772	1171	399 0	5:58 01:29
Route_7_Split_Aarau_Forward	Aarau	forward		St-Maurice
Castione-Arbedo 31	772	1168	396	04:32 00:00
Route_7_Split_Aarau_Reverse	Aarau	reverse	Cas	tione-Arbedo
	772		399 0	5:58 01:29
Route 8 Split Olten Forward	Olten	forward		St-Maurice
Stein am Rhein 34	777	161	-616	04:32 07:13
Route 8 Split Olten Reverse	Olten	reverse	St	ein am Rhein
St-Maurice 34	777	40	-737 0	5:13 05:53
Route 9 Split Zofingen Forward	Zofingen	forward		St-Maurice
Stein am Rhein 34	777	161	-616	04:32 07:13
Route 9 Split Zofingen Reverse	Zofingen	reverse	St	ein am Rhein
St-Maurice 34	777	40		5:13 05:53
Route 10 Split Zofingen Forward	Zofingen	forward		Genève S.
Vittore, Zona industriale	32	778	1101	323 04:46
23:07				
Route 10 Split Zofingen Reverse	Zofinaen	reverse S.	Vittore, Zona	industriale
20 270	11	200	250 04.27	00 05

 Genève
 32
 778
 1128
 350
 04:37
 23:25

 Route_11_Split_Zofingen_Forward
 Zofingen
 forward
 St-Maurice

 Castione-Arbedo
 32
 779
 1168
 389
 04:32
 00:00

```
Route_11_Split_Zofingen Reverse Zofingen reverse
                                     392
                                          Castione-Arbedo
St-Maurice 32 779 1171
                                           05:58 01:29
 Route_12_Split_Aarau_Forward Aarau forward
                                             St-Maurice
                                    399
Bellinzona 31 780 1179
                                           04:32 00:11
 Route 12 Split Aarau Reverse Aarau reverse
                                             Bellinzona
                                     408
St-Maurice 31 780 1188
                                           05:41 01:29
 Route_13_Split_Olten_Forward Olten forward
                                                 Genève
 Route_13_Split_Olten_Reverse Olten reverse Cast
Castione-Arbedo 31
                                                04:46 00:00
                                          Castione-Arbedo
Genève 31 788 1164 376 05:58 01:22
  Route_14_Split_Aarau_Forward Aarau forward
                                                Genève
 stione-Arbedo 31 788 1154 366 04:46 00:00 Route_14_Split_Aarau_Reverse Aarau reverse Castione-Arbedo
Castione-Arbedo 31
Genève 31 788 1164 376 05:58 01:22
 Route_15_Split_Olten_Forward Olten forward
                                                 Genève
 ein am Rhein 34 793 147
Route_15_Split_Olten_Reverse Olten reverse
Stein am Rhein 34
                                       -646 04:46 07:13
                                         Stein am Rhein
Genève 34 793
                       68 -725 05:13 06:21
______
=========
```

```
Total routes processed: 30
Successful: 30
```

Failed: 0

Average time difference: 157.4 minutes Shortest actual route: 40 minutes Longest actual route: 1188 minutes

```
Processing Route 16 Split Zofingen Forward (forward)...
```

Route: Genève → Stein am Rhein (34 stations)

Genève \rightarrow Lausanne: 04:46-05:38 (52min)

Lausanne → St-Maurice: 05:41-06:23 (42min)

St-Maurice → Renens VD: 06:28-07:22 (54min)

Renens VD → Neuchâtel: 07:41-08:21 (40min)

Neuchâtel → Kerzers: 08:32-08:49 (17min)

Kerzers → Lyss: 09:06-09:26 (20min)

Lyss → Delémont: 09:30-10:18 (48min)

Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)

Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)

Basel SBB \rightarrow Liestal: 11:31-11:47 (16min)

Liestal → Olten: 11:48-12:10 (22min)

Olten → Zofingen: 12:12-12:21 (9min)

Zofingen → Luzern: 12:29-13:01 (32min)

Luzern → Hergiswil NW: 13:12-13:23 (11min)

Hergiswil NW → Alpnachstad: 13:24-13:28 (4min)

Alphachstad → Hergiswil NW: 13:29-13:33 (4min)

Hergiswil NW \rightarrow Altdorf UR: 13:48-15:17 (89min)

Altdorf UR → Bellinzona: 16:08-16:42 (34min)

Bellinzona \rightarrow S. Vittore, Zona industriale: 16:45-17:07 (22min)

S. Vittore, Zona industriale → Bellinzona: 17:17-17:43 (26min)

Bellinzona → Altdorf UR: 17:47-19:17 (90min)

Altdorf UR → Arth-Goldau: 19:39-20:07 (28min)

Arth-Goldau \rightarrow Zug: 20:15-20:30 (15min)

Zug \rightarrow Zürich HB: 20:31-20:55 (24min)

Zürich HB \rightarrow Pfäffikon SZ: 21:12-21:39 (27min)

```
Ziegelbrücke → Uznach: 22:02-22:14 (12min)
  Uznach → Herisau: 22:17-22:46 (29min)
  Herisau → Jakobsbad: 22:58-23:18 (20min)
  Jakobsbad → Herisau: 05:08-05:30 (22min)
  Herisau \rightarrow St. Gallen: 05:37-05:47 (10min)
  St. Gallen \rightarrow Romanshorn: 05:49-06:16 (27min)
  Romanshorn → Stein am Rhein: 06:18-07:13 (55min)
  Total time: 2 hours 27 minutes (04:46 \rightarrow 07:13)
Results saved to sbb routes progress 16.json
Processing Route 16 Split Zofingen Reverse (reverse)...
Route: Stein am Rhein → Genève (34 stations)
  Stein am Rhein → Romanshorn: 05:13-06:12 (59min)
  Romanshorn → St. Gallen: 06:26-06:44 (18min)
  St. Gallen \rightarrow Herisau: 06:44-06:54 (10min)
  Herisau \rightarrow Jakobsbad: 06:58-07:18 (20min)
  Jakobsbad → Herisau: 07:38-08:00 (22min)
  Herisau → Uznach: 08:13-08:42 (29min)
  Uznach → Ziegelbrücke: 08:46-08:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 09:00-09:17 (17min)
  Pfäffikon SZ → Zürich HB: 09:19-09:48 (29min)
  Zürich HB → Zug: 10:05-10:29 (24min)
  Zug \rightarrow Arth-Goldau: 10:30-10:45 (15min)
  Arth-Goldau → Altdorf UR: 10:54-11:17 (23min)
  Altdorf UR → Bellinzona: 12:08-12:42 (34min)
  Bellinzona → S. Vittore, Zona industriale: 12:50-13:07 (17min)
  S. Vittore, Zona industriale \rightarrow Bellinzona: 13:17-13:39 (22min)
  Bellinzona → Altdorf UR: 13:47-15:17 (90min)
  Altdorf UR → Hergiswil NW: 15:40-16:39 (59min)
  Hergiswil NW → Alpnachstad: 16:54-16:58 (4min)
  Alphachstad → Hergiswil NW: 16:59-17:03 (4min)
  Hergiswil NW → Luzern: 17:03-17:16 (13min)
  Luzern \rightarrow Zofingen: 17:30-18:01 (31min)
  Zofingen \rightarrow Olten: 18:03-18:10 (7min)
  Olten → Liestal: 18:12-18:33 (21min)
  Liestal → Basel SBB: 18:34-18:45 (11min)
  Basel SBB → Laufen, Bahnhof: 18:47-19:26 (39min)
  Laufen, Bahnhof → Delémont: 20:06-20:19 (13min)
  Delémont → Lyss: 20:42-21:30 (48min)
  Lyss → Kerzers: 21:35-21:55 (20min)
  Kerzers → Neuchâtel: 22:11-22:28 (17min)
  Neuchâtel → Renens VD: 22:39-23:18 (39min)
  Renens VD \rightarrow St-Maurice: 23:26-00:27 (61min)
  St-Maurice → Lausanne: 04:32-05:27 (55min)
  Lausanne \rightarrow Genève: 05:30-06:21 (51min)
  Total time: 1 hours 8 minutes (05:13 \rightarrow 06:21)
Results saved to sbb routes progress 16.json
Processing Route 17 Split Zofingen Forward (forward)...
Route: Genève → Castione-Arbedo (32 stations)
  Genève \rightarrow Lausanne: 04:46-05:38 (52min)
  Lausanne → St-Maurice: 05:41-06:23 (42min)
```

Pfäffikon SZ → Ziegelbrücke: 21:39-21:58 (19min)

```
St-Maurice → Renens VD: 06:28-07:22 (54min)
  Renens VD \rightarrow Neuchâtel: 07:41-08:21 (40min)
  Neuchâtel → Kerzers: 08:32-08:49 (17min)
  Kerzers \rightarrow Lyss: 09:06-09:26 (20min)
  Lyss → Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB → Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Zofingen: 12:12-12:21 (9min)
  Zofingen → Luzern: 12:29-13:01 (32min)
  Luzern → Hergiswil NW: 13:12-13:23 (11min)
  Hergiswil NW → Alpnachstad: 13:24-13:28 (4min)
  Alphachstad → Hergiswil NW: 13:29-13:33 (4min)
  Hergiswil NW \rightarrow Luzern: 13:33-13:46 (13min)
  Luzern \rightarrow Zug: 13:51-14:21 (30min)
  Zug \rightarrow Zürich HB: 14:29-14:51 (22min)
  Zürich HB \rightarrow Schaffhausen: 15:05-15:43 (38min)
  Schaffhausen → Romanshorn: 15:49-17:12 (83min)
  Romanshorn \rightarrow St. Gallen: 17:26-17:44 (18min)
  St. Gallen → Herisau: 17:44-17:54 (10min)
  Herisau → Jakobsbad: 17:58-18:18 (20min)
  Jakobsbad → Herisau: 18:38-19:00 (22min)
  Herisau → Uznach: 19:13-19:42 (29min)
  Uznach → Ziegelbrücke: 19:46-19:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 20:00-20:17 (17min)
  Pfäffikon SZ → Altdorf UR: 20:19-21:51 (92min)
  Altdorf UR → S. Vittore, Zona industriale: 22:08-23:07 (59min)
  S. Vittore, Zona industriale \rightarrow Castione-Arbedo: 23:47-00:00 (13min)
  Total time: 19 hours 14 minutes (04:46 \rightarrow 00:00)
Results saved to sbb routes progress 17.json
Processing Route 17 Split Zofingen Reverse (reverse)...
Route: Castione-Arbedo → Genève (32 stations)
  Castione-Arbedo → S. Vittore, Zona industriale: 05:58-06:07 (9min)
  S. Vittore, Zona industriale → Altdorf UR: 06:47-07:50 (63min)
  Altdorf UR \rightarrow Pfäffikon SZ: 07:50-08:54 (64min)
  Pfäffikon SZ → Ziegelbrücke: 09:07-09:25 (18min)
  Ziegelbrücke → Uznach: 09:32-09:45 (13min)
  Uznach \rightarrow Herisau: 09:48-10:23 (35min)
  Herisau → Jakobsbad: 10:28-10:48 (20min)
  Jakobsbad → Herisau: 11:08-11:30 (22min)
  Herisau → St. Gallen: 11:37-11:47 (10min)
  St. Gallen \rightarrow Romanshorn: 11:49-12:16 (27min)
  Romanshorn → Schaffhausen: 12:18-13:43 (85min)
  Schaffhausen → Zürich HB: 13:47-14:23 (36min)
  Zürich HB → Zug: 14:33-14:59 (26min)
  Zug \rightarrow Luzern: 15:03-15:25 (22min)
  Luzern → Hergiswil NW: 15:27-15:39 (12min)
  Hergiswil NW → Alphachstad: 15:54-15:58 (4min)
  Alphachstad → Hergiswil NW: 15:59-16:03 (4min)
  Hergiswil NW \rightarrow Luzern: 16:03-16:16 (13min)
  Luzern \rightarrow Zofingen: 16:30-17:01 (31min)
  Zofingen \rightarrow Olten: 17:03-17:10 (7min)
```

```
Olten → Liestal: 17:12-17:33 (21min)
  Liestal \rightarrow Basel SBB: 17:34-17:45 (11min)
  Basel SBB → Laufen, Bahnhof: 17:47-18:26 (39min)
  Laufen, Bahnhof \rightarrow Delémont: 19:06-19:19 (13min)
  Delémont → Lyss: 19:42-20:30 (48min)
  Lyss \rightarrow Kerzers: 20:35-20:55 (20min)
  Kerzers → Neuchâtel: 21:11-21:28 (17min)
  Neuchâtel → Renens VD: 21:39-22:18 (39min)
  Renens VD \rightarrow St-Maurice: 22:26-23:27 (61min)
  St-Maurice → Lausanne: 23:32-00:15 (43min)
  Lausanne \rightarrow Genève: 00:30-01:22 (52min)
  Total time: 19 hours 24 minutes (05:58 \rightarrow 01:22)
Results saved to sbb routes progress 17.json
Processing Route 18 Split Aarau Forward (forward)...
Route: Genève → Bellinzona (31 stations)
  Genève \rightarrow Lausanne: 04:46-05:38 (52min)
  Lausanne → St-Maurice: 05:41-06:23 (42min)
  St-Maurice → Renens VD: 06:28-07:22 (54min)
  Renens VD → Neuchâtel: 07:41-08:21 (40min)
  Neuchâtel → Kerzers: 08:32-08:49 (17min)
  Kerzers → Lyss: 09:06-09:26 (20min)
  Lyss \rightarrow Delémont: 09:30-10:18 (48min)
  Delémont → Laufen, Bahnhof: 10:23-10:35 (12min)
  Laufen, Bahnhof → Basel SBB: 10:45-11:21 (36min)
  Basel SBB → Liestal: 11:31-11:47 (16min)
  Liestal → Olten: 11:48-12:10 (22min)
  Olten → Aarau: 12:20-12:29 (9min)
  Aarau → Zürich HB: 12:31-12:56 (25min)
  Zürich HB \rightarrow Schaffhausen: 13:05-13:43 (38min)
  Schaffhausen → Romanshorn: 13:49-15:12 (83min)
  Romanshorn \rightarrow St. Gallen: 15:26-15:44 (18min)
  St. Gallen \rightarrow Herisau: 15:44-15:54 (10min)
  Herisau → Jakobsbad: 15:58-16:18 (20min)
  Jakobsbad → Herisau: 16:38-17:00 (22min)
  Herisau → Uznach: 17:13-17:42 (29min)
  Uznach → Ziegelbrücke: 17:46-17:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 18:00-18:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 18:19-19:02 (43min)
  Zug → Luzern: 19:03-19:25 (22min)
  Luzern → Hergiswil NW: 19:27-19:39 (12min)
  Hergiswil NW → Alphachstad: 19:54-19:58 (4min)
  Alphachstad → Hergiswil NW: 19:59-20:03 (4min)
  Hergiswil NW → Altdorf UR: 20:18-21:51 (93min)
  Altdorf UR \rightarrow S. Vittore, Zona industriale: 22:08-23:07 (59min)
  S. Vittore, Zona industriale → Bellinzona: 23:47-00:11 (24min)
  Total time: 19 hours 25 minutes (04:46 \rightarrow 00:11)
Results saved to sbb routes progress 18.json
Processing Route 18 Split Aarau Reverse (reverse)...
Route: Bellinzona → Genève (31 stations)
  Bellinzona → S. Vittore, Zona industriale: 05:41-06:07 (26min)
  S. Vittore, Zona industriale → Altdorf UR: 06:47-07:50 (63min)
```

```
Altdorf UR → Hergiswil NW: 08:07-09:09 (62min)
  Hergiswil NW → Alpnachstad: 09:24-09:28 (4min)
  Alphachstad → Hergiswil NW: 09:29-09:33 (4min)
  Hergiswil NW \rightarrow Luzern: 09:33-09:46 (13min)
  Luzern \rightarrow Zug: 09:51-10:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 10:34-11:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 11:21-11:41 (20min)
  Ziegelbrücke → Uznach: 12:02-12:14 (12min)
  Uznach \rightarrow Herisau: 12:17-12:46 (29min)
  Herisau → Jakobsbad: 12:58-13:18 (20min)
  Jakobsbad → Herisau: 13:38-14:00 (22min)
  Herisau \rightarrow St. Gallen: 14:05-14:14 (9min)
  St. Gallen \rightarrow Romanshorn: 14:15-14:33 (18min)
  Romanshorn → Schaffhausen: 14:33-15:45 (72min)
  Schaffhausen → Zürich HB: 15:47-16:23 (36min)
  Zürich HB → Aarau: 16:38-17:05 (27min)
  Aarau → Olten: 17:08-17:21 (13min)
  Olten → Liestal: 17:33-17:49 (16min)
  Liestal → Basel SBB: 17:50-18:01 (11min)
  Basel SBB → Laufen, Bahnhof: 18:02-18:41 (39min)
  Laufen, Bahnhof → Delémont: 19:06-19:19 (13min)
  Delémont \rightarrow Lyss: 19:42-20:30 (48min)
  Lyss \rightarrow Kerzers: 20:35-20:55 (20min)
  Kerzers → Neuchâtel: 21:11-21:28 (17min)
  Neuchâtel → Renens VD: 21:39-22:18 (39min)
  Renens VD → St-Maurice: 22:26-23:27 (61min)
  St-Maurice → Lausanne: 23:32-00:15 (43min)
  Lausanne \rightarrow Genève: 00:30-01:22 (52min)
  Total time: 19 hours 41 minutes (05:41 \rightarrow 01:22)
Results saved to sbb_routes_progress_18.json
Processing Route 19 Split Aarau Forward (forward)...
Route: Fribourg \rightarrow S. Vittore, Zona industriale (32 stations)
  Fribourg → Lausanne: 05:27-06:20 (53min)
  Lausanne → St-Maurice: 06:31-07:12 (41min)
  St-Maurice → Renens VD: 07:14-08:05 (51min)
  Renens VD \rightarrow Genève: 08:23-08:55 (32min)
  Genève \rightarrow Renens VD: 09:05-09:37 (32min)
  Renens VD → Neuchâtel: 09:41-10:21 (40min)
  Neuchâtel → Biel/Bienne: 10:22-10:42 (20min)
  Biel/Bienne → Grenchen Nord: 10:48-10:58 (10min)
  Grenchen Nord → Delémont: 10:59-11:18 (19min)
  Delémont → Laufen, Bahnhof: 11:23-11:35 (12min)
  Laufen, Bahnhof → Basel SBB: 11:45-12:21 (36min)
  Basel SBB → Liestal: 12:31-12:47 (16min)
  Liestal → Aarau: 12:54-13:20 (26min)
  Aarau → Zürich HB: 13:23-13:52 (29min)
  Zürich HB → Schaffhausen: 14:05-14:43 (38min)
  Schaffhausen → Romanshorn: 14:49-16:12 (83min)
  Romanshorn → St. Gallen: 16:26-16:44 (18min)
  St. Gallen \rightarrow Herisau: 16:44-16:54 (10min)
  Herisau → Jakobsbad: 16:58-17:18 (20min)
  Jakobsbad → Herisau: 17:38-18:00 (22min)
  Herisau → Uznach: 18:13-18:42 (29min)
```

```
Uznach → Ziegelbrücke: 18:46-18:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 19:00-19:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 19:19-20:02 (43min)
  Zug \rightarrow Luzern: 20:03-20:25 (22min)
  Luzern → Hergiswil NW: 20:27-20:39 (12min)
  Hergiswil NW → Alpnachstad: 20:54-20:58 (4min)
  Alphachstad → Hergiswil NW: 20:59-21:03 (4min)
  Hergiswil NW → Altdorf UR: 21:18-22:51 (93min)
  Altdorf UR → Bellinzona: 00:08-00:47 (39min)
  Bellinzona \rightarrow S. Vittore, Zona industriale: 05:41-06:07 (26min)
  Total time: 0 hours 40 minutes (05:27 \rightarrow 06:07)
Results saved to sbb routes progress 19.json
Processing Route_19_Split_Aarau_Reverse (reverse)...
Route: S. Vittore, Zona industriale → Fribourg (32 stations)
  Bellinzona → Altdorf UR: 05:07-05:50 (43min)
  Altdorf UR → Hergiswil NW: 06:07-07:09 (62min)
  Hergiswil NW → Alphachstad: 07:24-07:28 (4min)
  Alphachstad → Hergiswil NW: 07:29-07:33 (4min)
  Hergiswil NW → Luzern: 07:33-07:46 (13min)
  Luzern \rightarrow Zug: 07:51-08:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 08:34-09:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 09:21-09:41 (20min)
  Ziegelbrücke → Uznach: 10:02-10:14 (12min)
  Uznach → Herisau: 10:17-10:46 (29min)
  Herisau → Jakobsbad: 10:58-11:18 (20min)
  Jakobsbad → Herisau: 11:38-12:00 (22min)
  Herisau \rightarrow St. Gallen: 12:05-12:14 (9min)
  St. Gallen → Romanshorn: 12:15-12:33 (18min)
  Romanshorn → Schaffhausen: 12:33-13:45 (72min)
  Schaffhausen → Zürich HB: 13:47-14:23 (36min)
  Zürich HB → Aarau: 14:38-15:05 (27min)
  Aarau → Liestal: 15:13-15:49 (36min)
  Liestal → Basel SBB: 15:50-16:01 (11min)
  Basel SBB → Laufen, Bahnhof: 16:02-16:41 (39min)
  Laufen, Bahnhof → Delémont: 17:06-17:19 (13min)
  Delémont → Grenchen Nord: 17:42-18:00 (18min)
  Grenchen Nord → Biel/Bienne: 18:01-18:11 (10min)
  Biel/Bienne → Neuchâtel: 18:18-18:37 (19min)
  Neuchâtel → Renens VD: 18:39-19:18 (39min)
  Renens VD \rightarrow Genève: 19:23-19:55 (32min)
  Genève \rightarrow Renens VD: 20:05-20:37 (32min)
  Renens VD → St-Maurice: 20:38-21:31 (53min)
  St-Maurice → Lausanne: 21:32-22:25 (53min)
  Lausanne → Fribourg: 22:40-23:32 (52min)
  Total time: 18 hours 55 minutes (04:37 \rightarrow 23:32)
Results saved to sbb routes progress 19.json
Processing Route 20 Split Olten Forward (forward)...
Route: Fribourg → S. Vittore, Zona industriale (32 stations)
  Fribourg \rightarrow Lausanne: 05:27-06:20 (53min)
  Lausanne → St-Maurice: 06:31-07:12 (41min)
  St-Maurice → Renens VD: 07:14-08:05 (51min)
```

```
Renens VD \rightarrow Genève: 08:23-08:55 (32min)
  Genève \rightarrow Renens VD: 09:05-09:37 (32min)
  Renens VD → Neuchâtel: 09:41-10:21 (40min)
  Neuchâtel → Biel/Bienne: 10:22-10:42 (20min)
  Biel/Bienne → Delémont: 10:48-11:18 (30min)
  Delémont → Laufen, Bahnhof: 11:23-11:35 (12min)
  Laufen, Bahnhof → Basel SBB: 11:45-12:21 (36min)
  Basel SBB → Liestal: 12:31-12:47 (16min)
  Liestal → Olten: 12:48-13:10 (22min)
  Olten → Aarau: 13:20-13:29 (9min)
  Aarau → Zürich HB: 13:31-13:56 (25min)
  Zürich HB → Schaffhausen: 14:05-14:43 (38min)
  Schaffhausen → Romanshorn: 14:49-16:12 (83min)
  Romanshorn → St. Gallen: 16:26-16:44 (18min)
  St. Gallen \rightarrow Herisau: 16:44-16:54 (10min)
  Herisau → Jakobsbad: 16:58-17:18 (20min)
  Jakobsbad → Herisau: 17:38-18:00 (22min)
  Herisau \rightarrow Uznach: 18:13-18:42 (29min)
  Uznach → Ziegelbrücke: 18:46-18:57 (11min)
  Ziegelbrücke → Pfäffikon SZ: 19:00-19:17 (17min)
  Pfäffikon SZ \rightarrow Zug: 19:19-20:02 (43min)
  Zug \rightarrow Luzern: 20:03-20:25 (22min)
  Luzern → Hergiswil NW: 20:27-20:39 (12min)
  Hergiswil NW → Alpnachstad: 20:54-20:58 (4min)
  Alphachstad → Hergiswil NW: 20:59-21:03 (4min)
  Hergiswil NW → Altdorf UR: 21:18-22:51 (93min)
  Altdorf UR → Bellinzona: 00:08-00:47 (39min)
  Bellinzona → S. Vittore, Zona industriale: 05:41-06:07 (26min)
  Total time: 0 hours 40 minutes (05:27 \rightarrow 06:07)
Results saved to sbb_routes_progress_20.json
Processing Route_20_Split_Olten_Reverse (reverse)...
Route: S. Vittore, Zona industriale → Fribourg (32 stations)
  Bellinzona → Altdorf UR: 05:07-05:50 (43min)
  Altdorf UR → Hergiswil NW: 06:07-07:09 (62min)
  Hergiswil NW → Alphachstad: 07:24-07:28 (4min)
  Alphachstad → Hergiswil NW: 07:29-07:33 (4min)
  Hergiswil NW → Luzern: 07:33-07:46 (13min)
  Luzern \rightarrow Zug: 07:51-08:21 (30min)
  Zug \rightarrow Pfäffikon SZ: 08:34-09:19 (45min)
  Pfäffikon SZ → Ziegelbrücke: 09:21-09:41 (20min)
  Ziegelbrücke → Uznach: 10:02-10:14 (12min)
  Uznach → Herisau: 10:17-10:46 (29min)
  Herisau → Jakobsbad: 10:58-11:18 (20min)
  Jakobsbad → Herisau: 11:38-12:00 (22min)
  Herisau \rightarrow St. Gallen: 12:05-12:14 (9min)
  St. Gallen \rightarrow Romanshorn: 12:15-12:33 (18min)
  Romanshorn → Schaffhausen: 12:33-13:45 (72min)
  Schaffhausen → Zürich HB: 13:47-14:23 (36min)
  Zürich HB → Aarau: 14:38-15:05 (27min)
  Aarau → Olten: 15:08-15:21 (13min)
  Olten → Liestal: 15:33-15:49 (16min)
  Liestal \rightarrow Basel SBB: 15:50-16:01 (11min)
  Basel SBB → Laufen, Bahnhof: 16:02-16:41 (39min)
```

Laufen, Bahnhof → Delémont: 17:06-17:19 (13min) Delémont → Biel/Bienne: 17:42-18:11 (29min) Biel/Bienne → Neuchâtel: 18:18-18:37 (19min) Neuchâtel \rightarrow Renens VD: 18:39-19:18 (39min) Renens VD \rightarrow Genève: 19:23-19:55 (32min) Genève \rightarrow Renens VD: 20:05-20:37 (32min) Renens VD \rightarrow St-Maurice: 20:38-21:31 (53min) St-Maurice \rightarrow Lausanne: 21:32-22:25 (53min) Lausanne → Fribourg: 22:40-23:32 (52min) Total time: 18 hours 55 minutes $(04:37 \rightarrow 23:32)$

Results saved to sbb_routes_progress_20.json

ROUTE SUMMARY TABLE

ROUTE SUMMARY TABLE				
	=======	========		
	Split D	iroction		Start
End Stations Original Time A	_		Start Time End	
Route 1 Split Olten Forward	Olten	forward	Start Time End	St-Maurice S.
Route_1_Split_Olten_Forward Vittore, Zona industriale	31	755	1115	360 04:32
23:07	Ji	733	1115	300 01.32
Route 1 Split Olten Reverse	Olten	reverse S.	Vittore, Zona	industriale
St-Maurice 31			341 04	
Route 2 Split Aarau Forward				St-Maurice S.
Vittore, Zona industriale	31	755	1115	360 04:32
23:07				
Route_2_Split_Aarau_Reverse	Aarau	reverse S.	Vittore, Zona	industriale
St-Maurice 31		1096		
Route_3_Split_Zofingen_Forward	Zofingen	forward		St-Maurice S.
Vittore, Zona industriale	32	762	1115	353 04:32
23:07				
Route_3_Split_Zofingen_Reverse	Zofingen	reverse S.	Vittore, Zona	industriale
St-Maurice 32	762	1096	334 04	:37 22:53
Route_4_Split_Olten_Forward	Olten	forward		Genève S.
Vittore, Zona industriale	31	771	1101	330 04:46
23:07				
Route_4_Split_Olten_Reverse				
Genève 31 771			357 04:37	
Route_5_Split_Aarau_Forward		forward		Genève S.
Vittore, Zona industriale	31	771	1101	330 04:46
23:07	-			
Route_5_Split_Aarau_Reverse Genève 31 771	Aarau 11			
			357 04:37	23:25 St-Maurice
Route_6_Split_Olten_Forward Castione-Arbedo 31				
Route_6_Split_Olten_Reverse	01+00	1100	390 Cast	04:32 00:00
St-Maurice 31	772	1171	300 05	•50 01•20
Route_6_Split_Olten_Reverse St-Maurice 31 Route_7_Split_Aarau_Forward Castione-Arbedo 31	772 Aaran	forward	399 03	St-Maurice
Castione-Arhedo 31	772	1168	396	04.32 00.00
Route_7_Split_Aarau_Reverse	Aarau	reverse	Cast	ione-Arbedo
St-Maurice 31	772	1171	399 05	
Route 8 Split Olten Forward				
Stein am Rhein 34	777	161	-616	St-Maurice 04:32 07:13

Route 8 Split Olten Reverse	Oltan	reverse		Stein am Rhein
St-Maurice 34	777	40	_737	05:13 05:53
Route 9 Split Zofingen Forward			757	St-Maurice
Stein am Rhein 34	777		_616	04:32 07:13
Route 9 Split Zofingen Reverse				Stein am Rhein
St-Maurice 34	777	40		05:13 05:53
Route 10 Split Zofingen Forward			757	Genève S.
Vittore, Zona industriale		778	1101	323 04:46
23:07	52	770	1101	323 04.40
Route 10 Split Zofingen Reverse	Zofingen	reverse S	Wittore 7	ona industriale
Genève 32 778			350 04	
Route_11_Split_Zofingen_Forward			550 01	St-Maurice
Castione-Arbedo 32			i8 38	
Route_11_Split_Zofingen_Reverse				Castione-Arbedo
St-Maurice 32		1171	392	05:58 01:29
Route 12 Split Aarau Forward			372	St-Maurice
Bellinzona 31		1179	399	04:32 00:11
Route 12 Split Aarau Reverse			2,3,3	Bellinzona
St-Maurice 31		1188	408	05:41 01:29
Route 13 Split Olten Forward			- 0 0	Genève
Castione-Arbedo 31	788		36	6 04:46 00:00
Route_13_Split_Olten_Reverse	Olten			Castione-Arbedo
Genève 31 788	1	164		:58 01:22
Route_14_Split_Aarau_Forward	Aarau	forward		Genève
Castione-Arbedo 31	788	115	36	6 04:46 00:00
Route_14_Split_Aarau_Reverse	Aarau	reverse		Castione-Arbedo
Genève 31 788		164	376 05	:58 01:22
Route_15_Split_Olten_Forward	Olten	forward		Genève
Stein am Rhein 34	793	147	-646	04:46 07:13
Route_15_Split_Olten_Reverse	Olten	reverse		Stein am Rhein
Genève 34 793		68	-725 05	:13 06:21
Route_16_Split_Zofingen_Forward				Genève
Stein am Rhein 34				04:46 07:13
Route_16_Split_Zofingen_Reverse				Stein am Rhein
Genève 34 793			-725 05	:13 06:21
Route_17_Split_Zofingen_Forward				Genève
Castione-Arbedo 32				9 04:46 00:00
Route_17_Split_Zofingen_Reverse	Zofingen	reverse		Castione-Arbedo
	1		369 05	:58 01:22
Route_18_Split_Aarau_Forward				Genève
Bellinzona 31		1165	369	04:46 00:11
Route_18_Split_Aarau_Reverse			205 05	Bellinzona
Genève 31 796		181	385 05	:41 01:22
Route_19_Split_Aarau_Forward			4.0	Fribourg S.
Vittore, Zona industriale 06:07	32	811	40	-771 05 : 27
Route_19_Split_Aarau_Reverse	7	rottores	! 7/1++020 7	ona industrials
		reverse S		ona industriale 04:37 23:32
Route 20 Split Olten Forward			J 2 4	Fribourg S.
Vittore, Zona industriale		812	40	-772 05:27
06:07	J 2	012	40	112 05.21
Route_20_Split_Olten_Reverse	Olten	reverse S	. Vittore. 7	ona industriale
	12	1135		04:37 23:32
				=======================================

Total routes processed: 40

Successful: 40 Failed: 0

Average time difference: 98.4 minutes Shortest actual route: 40 minutes Longest actual route: 1188 minutes