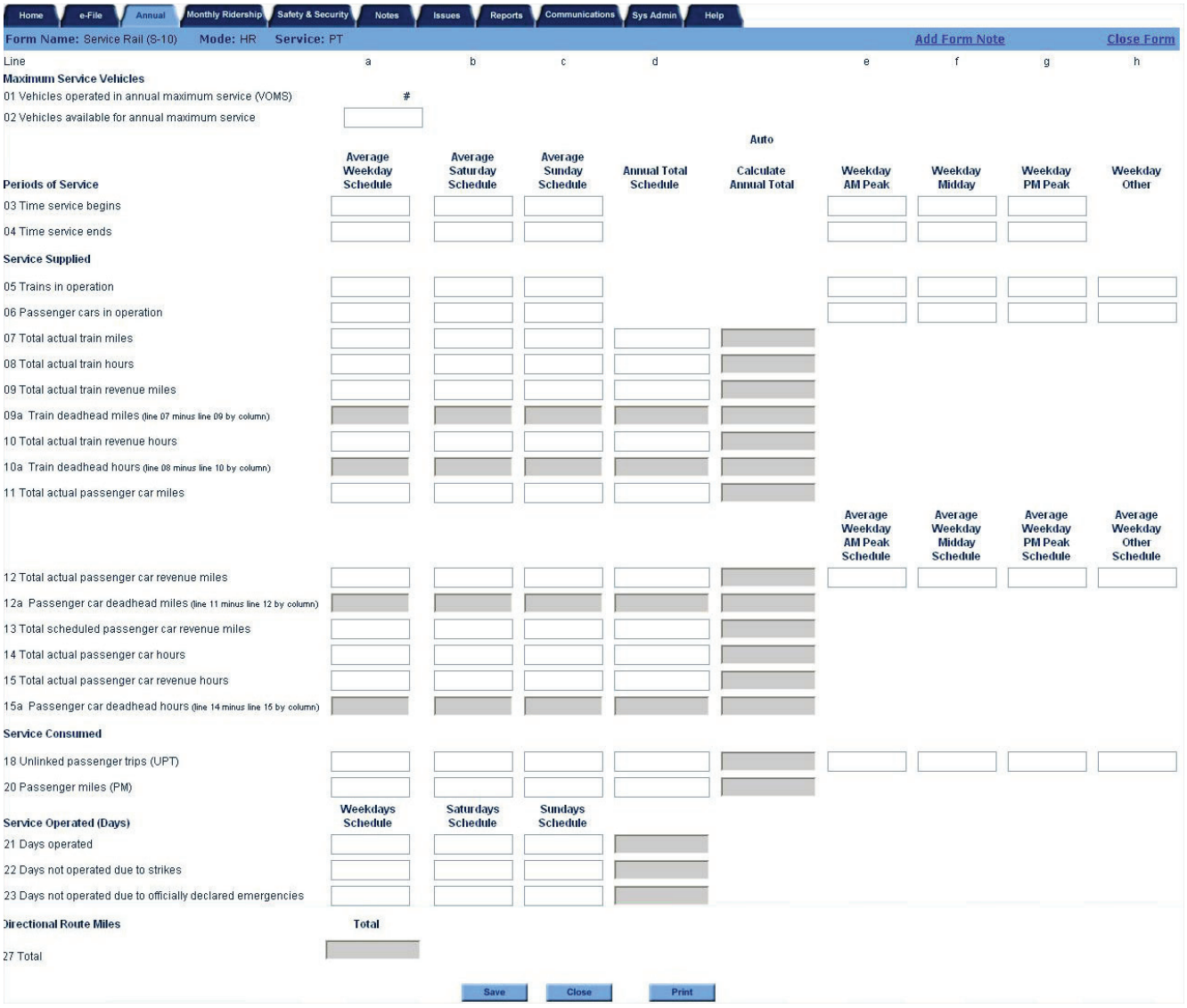
Service form (S-10)



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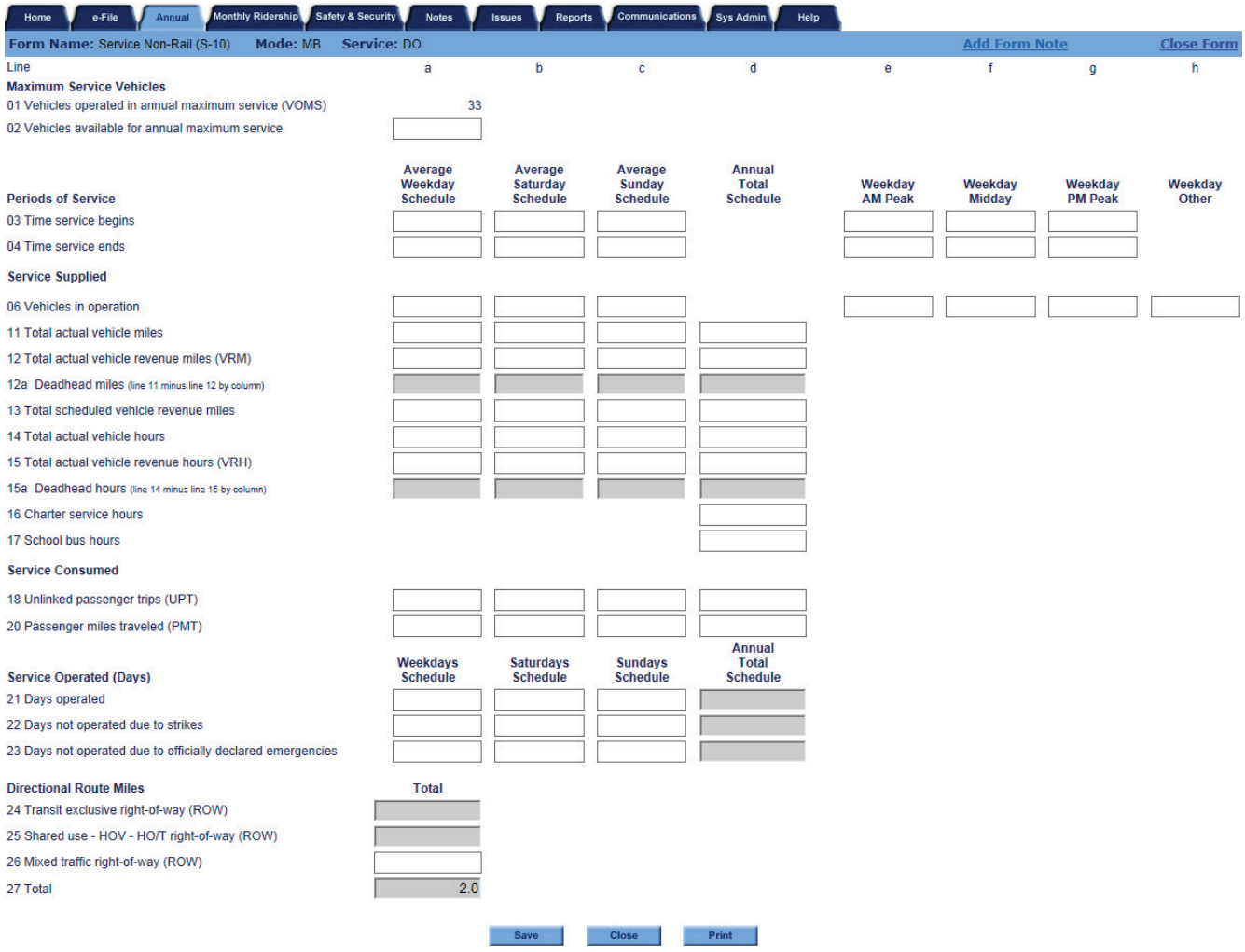
Form Name: Service Rail (S-10) **Mode:** HR **Service:** PT — Add Form Note — Close Form

Line	a	b	c	d		e	f	g	h
Maximum Service Vehicles									
01 Vehicles operated in annual maximum service (VOMS)	#								
02 Vehicles available for annual maximum service									
Periods of Service	Average Weekday Schedule	Average Saturday Schedule	Average Sunday Schedule	Annual Total Schedule	Auto Calculate Annual Total	Weekday AM Peak	Weekday Midday	Weekday PM Peak	Weekday Other
03 Time service begins									
04 Time service ends									
Service Supplied									
05 Trains in operation									
06 Passenger cars in operation									
07 Total actual train miles									
08 Total actual train hours									
09 Total actual train revenue miles									
09a Train deadhead miles (line 07 minus line 09 by column)									
10 Total actual train revenue hours									
10a Train deadhead hours (line 08 minus line 10 by column)									
11 Total actual passenger car miles									
						Average Weekday AM Peak Schedule	Average Weekday Midday Schedule	Average Weekday PM Peak Schedule	Average Weekday Other Schedule
12 Total actual passenger car revenue miles									
12a Passenger car deadhead miles (line 11 minus line 12 by column)									
13 Total scheduled passenger car revenue miles									
14 Total actual passenger car hours									
15 Total actual passenger car revenue hours									
15a Passenger car deadhead hours (line 14 minus line 15 by column)									
Service Consumed									
18 Unlinked passenger trips (UPT)									
20 Passenger miles (PM)									
Service Operated (Days)	Weekdays Schedule	Saturdays Schedule	Sundays Schedule						
21 Days operated									
22 Days not operated due to strikes									
23 Days not operated due to officially declared emergencies									
Directional Route Miles	Total								
27 Total									

Save | Close | Print



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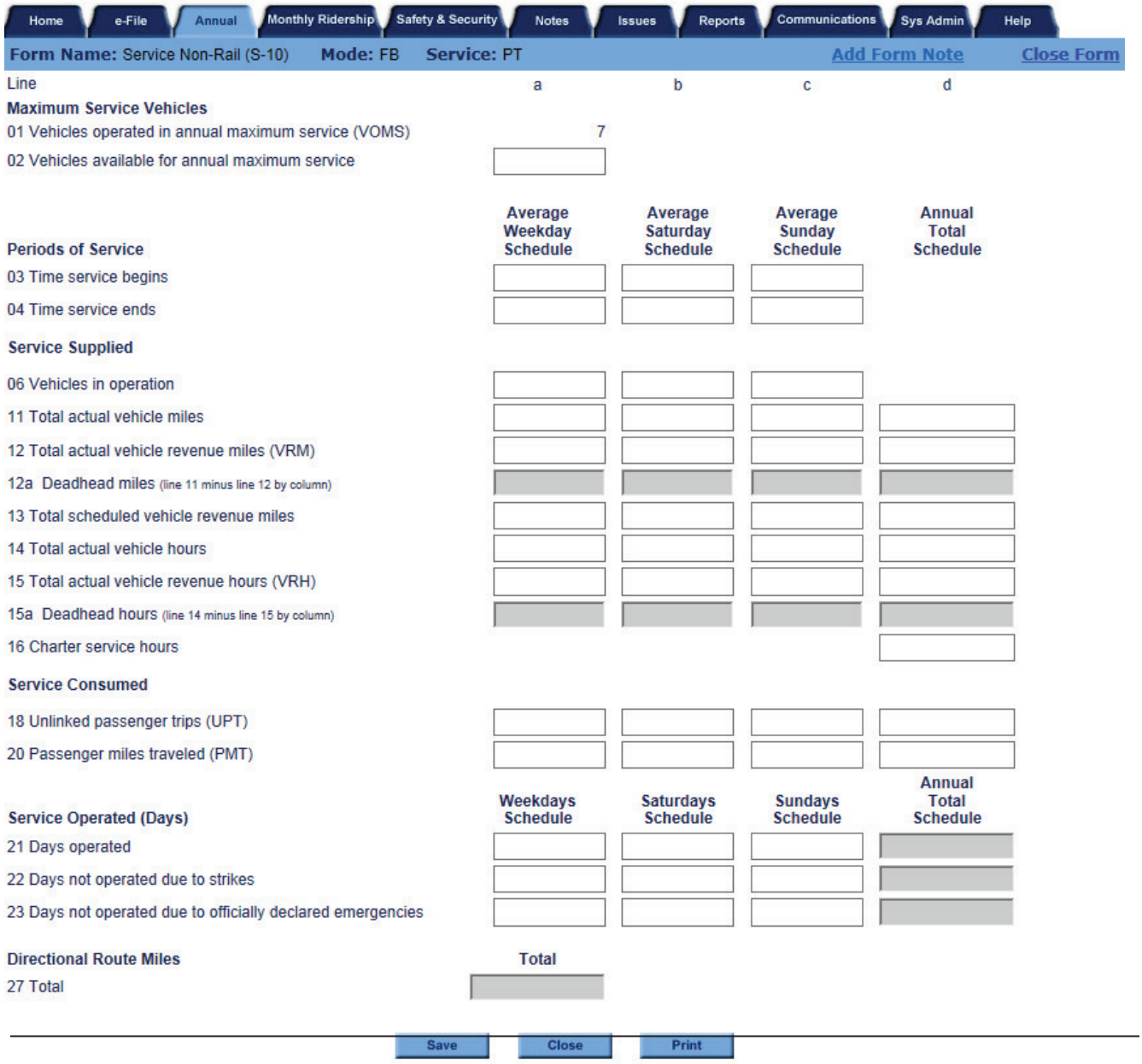
Form Name: Service Non-Rail (S-10) **Mode:** MB **Service:** DO — Add Form Note — Close Form

Line	a	b	c	d	e	f	g	h
Maximum Service Vehicles								
01 Vehicles operated in annual maximum service (VOMS)	33							
02 Vehicles available for annual maximum service								
Periods of Service	Average Weekday Schedule	Average Saturday Schedule	Average Sunday Schedule	Annual Total Schedule	Weekday AM Peak	Weekday Midday	Weekday PM Peak	Weekday Other
03 Time service begins								
04 Time service ends								
Service Supplied								
06 Vehicles in operation								
11 Total actual vehicle miles								
12 Total actual vehicle revenue miles (VRM)								
12a Deadhead miles (line 11 minus line 12 by column)								
13 Total scheduled vehicle revenue miles								
14 Total actual vehicle hours								
15 Total actual vehicle revenue hours (VRH)								
15a Deadhead hours (line 14 minus line 15 by column)								
16 Charter service hours								
17 School bus hours								
Service Consumed								
18 Unlinked passenger trips (UPT)								
20 Passenger miles traveled (PMT)								
Service Operated (Days)	Weekdays Schedule	Saturdays Schedule	Sundays Schedule	Annual Total Schedule				
21 Days operated								
22 Days not operated due to strikes								
23 Days not operated due to officially declared emergencies								
Directional Route Miles	Total							
24 Transit exclusive right-of-way (ROW)								
25 Shared use - HOV - HO/T right-of-way (ROW)								
26 Mixed traffic right-of-way (ROW)								
27 Total	2.0							

Save | Close | Print



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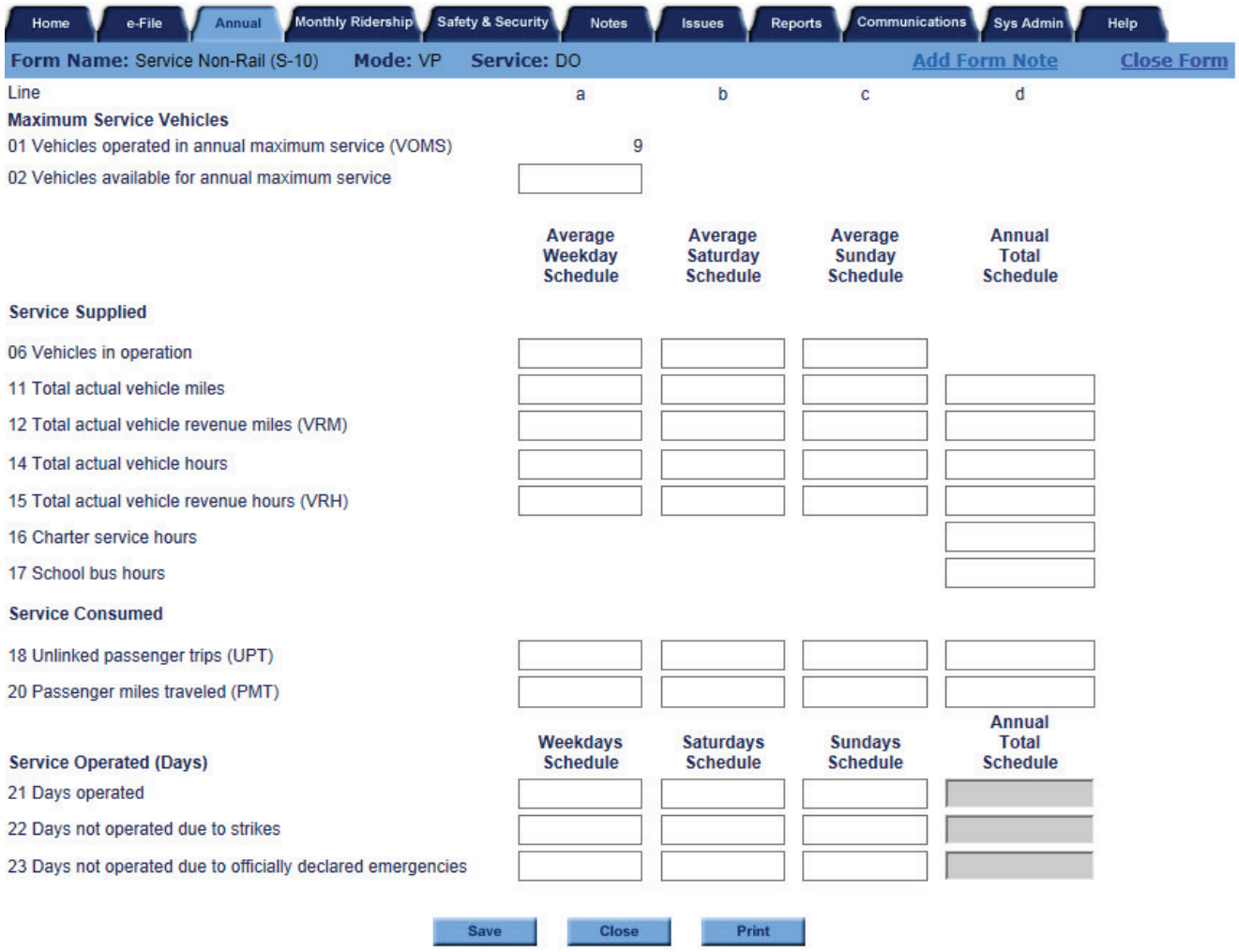
Form Name: Service Non-Rail (S-10) **Mode:** FB **Service:** PT — Add Form Note — Close Form

Line	a	b	c	d
Maximum Service Vehicles				
01 Vehicles operated in annual maximum service (VOMS)	7			
02 Vehicles available for annual maximum service				
Periods of Service	**Average Weekday Schedule**	**Average Saturday Schedule**	**Average Sunday Schedule**	**Annual Total Schedule**
03 Time service begins				
04 Time service ends				
Service Supplied				
06 Vehicles in operation				
11 Total actual vehicle miles				
12 Total actual vehicle revenue miles (VRM)				
12a Deadhead miles (line 11 minus line 12 by column)				
13 Total scheduled vehicle revenue miles				
14 Total actual vehicle hours				
15 Total actual vehicle revenue hours (VRH)				
15a Deadhead hours (line 14 minus line 15 by column)				
16 Charter service hours				
Service Consumed				
18 Unlinked passenger trips (UPT)				
20 Passenger miles traveled (PMT)				
Service Operated (Days)	**Weekdays Schedule**	**Saturdays Schedule**	**Sundays Schedule**	**Annual Total Schedule**
21 Days operated				
22 Days not operated due to strikes				
23 Days not operated due to officially declared emergencies				
Directional Route Miles	**Total**			
27 Total				

Save | Close | Print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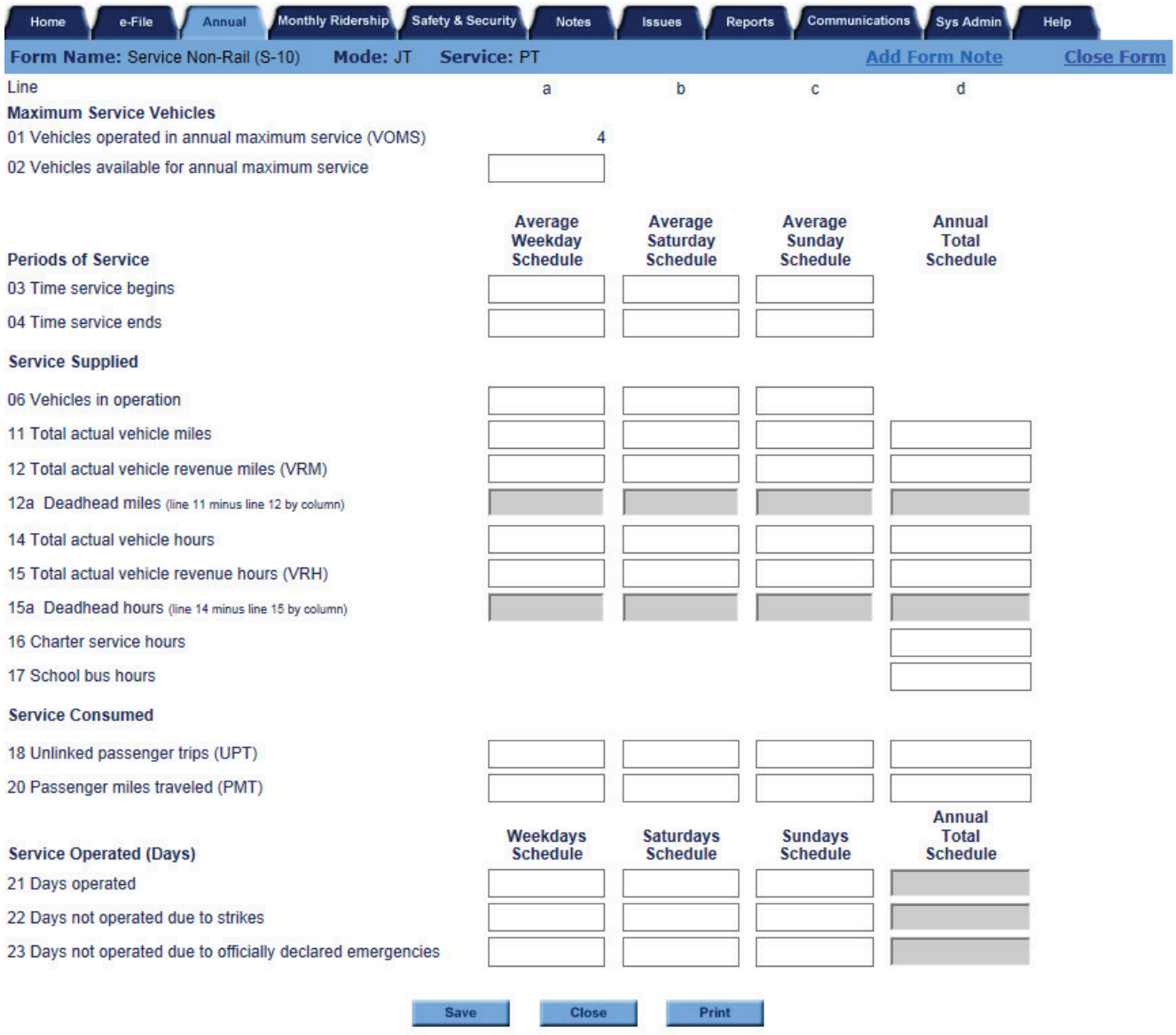
Help
Form Name: Service Non-Rail (S-10) Mode: VP Service: DO
Add Form Note
Close Form
Line
a
b
c
d
Maximum Service Vehicles
01 Vehicles operated in annual maximum service (VOMS) 9
02 Vehicles available for annual maximum service
Average Weekday Schedule
Average Saturday Schedule
Average Sunday Schedule
Annual Total Schedule
Service Supplied
06 Vehicles in operation
11 Total actual vehicle miles
12 Total actual vehicle revenue miles (VRM)
14 Total actual vehicle hours
15 Total actual vehicle revenue hours (VRH)
16 Charter service hours
17 School bus hours
Service Consumed
18 Unlinked passenger trips (UPT)
20 Passenger miles traveled (PMT)
Service Operated (Days)
Weekdays Schedule
Saturdays Schedule
Sundays Schedule
Annual Total Schedule
21 Days operated
22 Days not operated due to strikes
23 Days not operated due to officially declared emergencies
Save
Close
Print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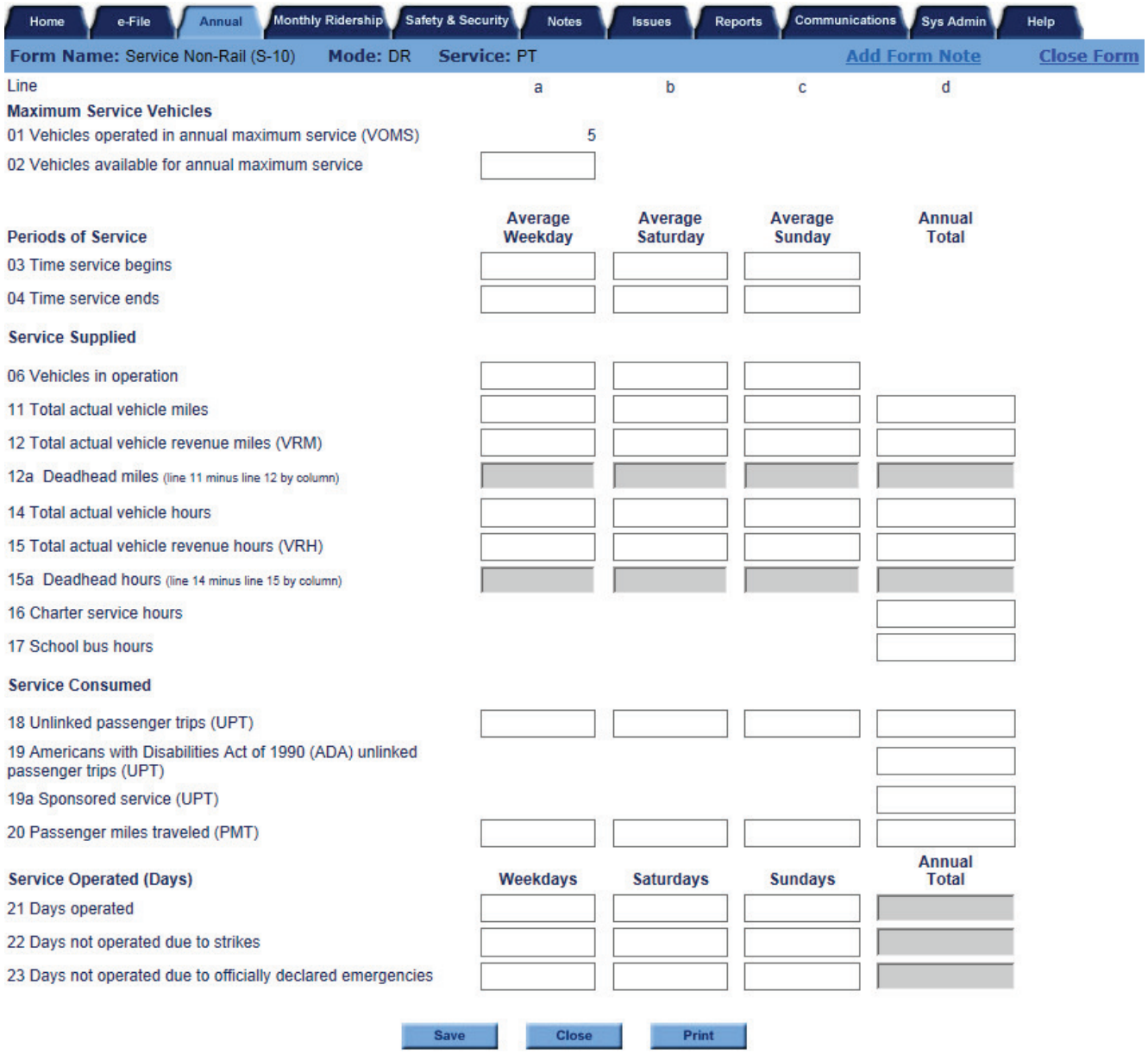
Form Name: Service Non-Rail (S-10) Mode: JT Service: PT
Add Form Note
Close Form
Line
a
b
c
d
Maximum Service Vehicles
01 Vehicles operated in annual maximum service (VOMS)
4
02 Vehicles available for annual maximum service
Periods of Service
Average Weekday Schedule
Average Saturday Schedule
Average Sunday Schedule
Annual Total Schedule
03 Time service begins
04 Time service ends
Service Supplied
06 Vehicles in operation
11 Total actual vehicle miles
12 Total actual vehicle revenue miles (VRM)
12a Deadhead miles (line 11 minus line 12 by column)
14 Total actual vehicle hours
15 Total actual vehicle revenue hours (VRH)
15a Deadhead hours (line 14 minus line 15 by column)
16 Charter service hours
17 School bus hours
Service Consumed
18 Unlinked passenger trips (UPT)
20 Passenger miles traveled (PMT)
Service Operated (Days)
Weekdays Schedule
Saturdays Schedule
Sundays Schedule
Annual Total Schedule
21 Days operated
22 Days not operated due to strikes
23 Days not operated due to officially declared emergencies
Save
Close
Print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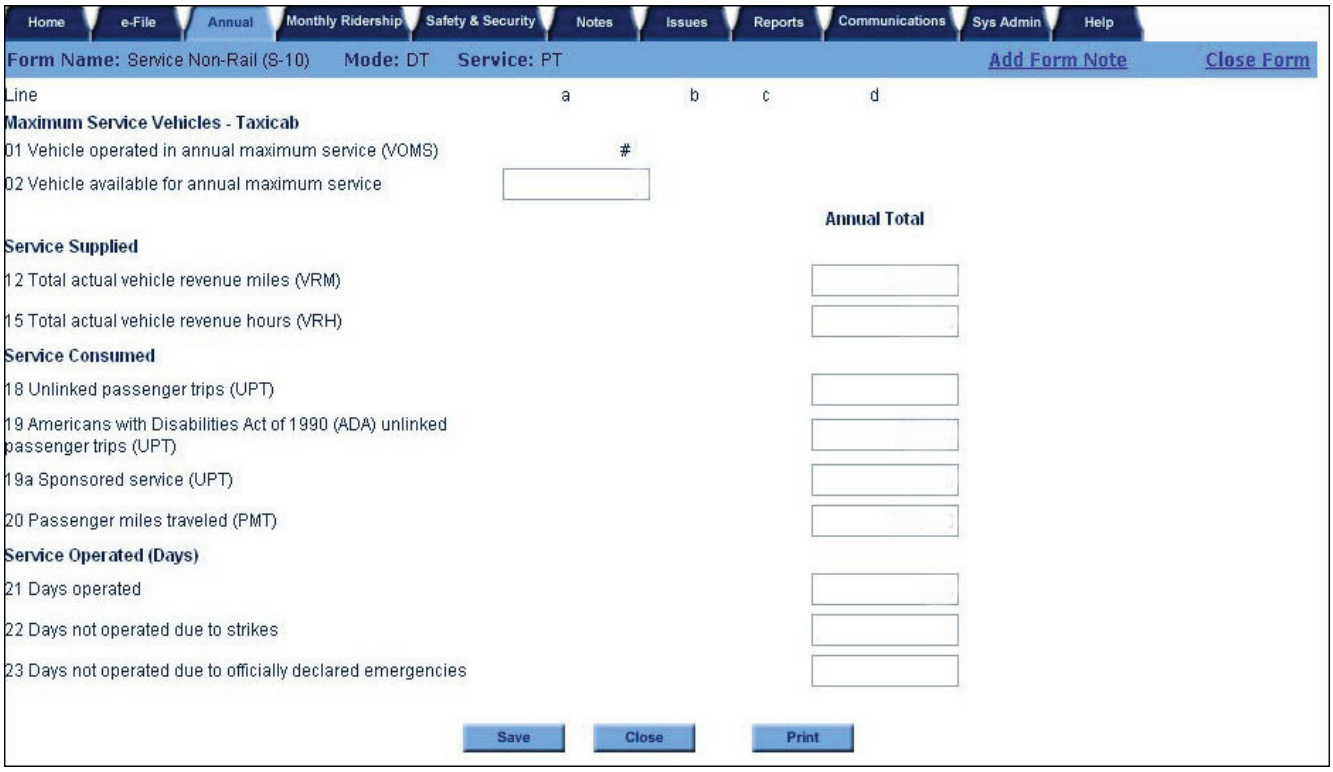
Help
Form Name: Service Non-Rail (S-10) Mode: DR Service: PT
Add Form Note
Close Form
Line
a
b
c
d
Maximum Service Vehicles
01 Vehicles operated in annual maximum service (VOMS)
5
02 Vehicles available for annual maximum service
Periods of Service
Average Weekday
Average Saturday
Average Sunday
Annual Total
03 Time service begins
04 Time service ends
Service Supplied
06 Vehicles in operation
11 Total actual vehicle miles
12 Total actual vehicle revenue miles (VRM)
12a Deadhead miles (line 11 minus line 12 by column)
14 Total actual vehicle hours
15 Total actual vehicle revenue hours (VRH)
15a Deadhead hours (line 14 minus line 15 by column)
16 Charter service hours
17 School bus hours
Service Consumed
18 Unlinked passenger trips (UPT)
19 Americans with Disabilities Act of 1990 (ADA) unlinked passenger trips (UPT)
19a Sponsored service (UPT)
20 Passenger miles traveled (PMT)
Service Operated (Days)
Weekdays
Saturdays
Sundays
Annual Total
21 Days operated
22 Days not operated due to strikes
23 Days not operated due to officially declared emergencies
Save
Close
Print


Home
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Monthly Ridership
Safety & Security
Notes
Issues
Reports
Communications
Sys Admin
Help
Form Name: Service Non-Rail (S-10)
Mode: DT
Service: PT
Add Form Note
Close Form
Line
a
b
c
d
Maximum Service Vehicles - Taxicab
01 Vehicle operated in annual maximum service (VOMS)
#
02 Vehicle available for annual maximum service
Annual Total
Service Supplied
12 Total actual vehicle revenue miles (VRM)
15 Total actual vehicle revenue hours (VRH)
Service Consumed
18 Unlinked passenger trips (UPT)
19 Americans with Disabilities Act of 1990 (ADA) unlinked passenger trips (UPT)
19a Sponsored service (UPT)
20 Passenger miles traveled (PMT)
Service Operated (Days)
21 Days operated
22 Days not operated due to strikes
23 Days not operated due to officially declared emergencies
Save
Close
Print

Overview

You will use the service form (S-10) to report data on the transit service supplied by your agency and transit service consumed by passengers on the system.

Reporting Requirements and Thresholds

All transit agencies must complete this form. You should complete one form for each mode and type of service (TOS).

When completing this form, use the MB mode for any route deviation or point deviation services operated. Typically, deviated services are used to comply with the Americans with Disabilities Act of 1990 (ADA) requirements to provide complementary paratransit service. See discussion in the Identification form (B-10).

What Has Changed from Prior Year

The directional route mile categories for MB, CB, and RB modes have been revised to conform to the new requirements in MAP-21.

Approach

You should use this form to report data for the revenue vehicles used to provide transit service, including:

- Vehicle requirements for maximum service;
- Periods of service;
- Service supplied (miles and hours);
- Service consumed (passenger boardings and miles);
- Days service operated; and
- Directional route miles (DRM).

You report most data items by four time periods:

- Average Weekday;
- Average Saturday;
- Average Sunday; and
- Annual total.

You report limited data for weekday time periods: Weekday AM Peak, Weekday Midday, Weekday PM Peak, and Weekday Other.

The service supplied data are also distinguished by whether they are for rail or non-rail modes. For non-rail modes, reporters provide vehicle statistics, but for rail service, reporters provide data in terms of both passenger cars and trains.

Consistent with the general NTD reporting requirements, you should report **actual, not estimated, data** on this form. **The only exceptions are the values you report for PMT and UPT**. The sampling requirements for these data items are discussed later in this section under Passenger Miles Traveled and Unlinked Passenger Trip Data.

Reporting by Time Period

There are three basic time periods — average day schedules (weekday, Saturday or Sunday), peak and off-peak periods for an average weekday, and annual.

Average Daily Totals

You should report average daily data for an average weekday schedule, an average Saturday schedule, and an average Sunday schedule.

Average daily data depends on whether services are fixed route or non-fixed route.

- For scheduled, fixed route services, such as MB, CB. RB and rail modes, the average daily totals are for service that your agency usually operated, i.e., service operated on typical days. **Average daily totals do not include service operated for one-time or limited events** such as day-of-the-game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States. They do not include extra service supplied to

meet demand, whether associated with a special event or not. They also do not include severe inclement weather days such as hurricanes and snowstorms.

- For non-fixed route and non-scheduled services (e.g., DR and VP) the average daily totals cover all days operated by your agency, typical and atypical.

The average daily data cover the service operated on typical days in accordance with the normal schedule (for fixed schedule service). Most transit agencies operate different schedules reflecting seasonal variation in demand for service. Additionally, transit agencies may add or delete service on certain routes during the year. The average daily totals must account for the seasonal variation in service by taking a weighted average over the course of the year.

A typical day is a day on which your transit agency:

- Operates its normal, regular schedule;
- Does not provide extra service to meet demands for special events such as conventions, parades, or public celebrations; and
- Does not operate significantly reduced service because of unusually bad weather (e.g., snow storms, hurricanes, tornadoes, earthquakes) or major public disruptions (e.g., terrorism).

The average daily totals apply to the schedules developed for these days. Often, transit systems operate the Sunday schedule on holidays that fall on Monday through Saturday. **You should include the data for these holidays in the day schedule that is operated (e.g., Sunday).**

You should calculate the average daily totals (weekday, Saturday and Sunday) as the mathematical average for the service operated on typical days. This is the total service supplied or service consumed data for typical days divided by the number of typical days.

The following exhibit provides examples illustrating how to compute average daily totals.

Exhibit 45 — Computing Average Daily Data

Example 1: How do I compute the actual vehicle miles for average weekday total for MB?

Solution: You calculate the mathematical average of total actual vehicle miles for typical weekdays.

	Typical Weekday Operation	Atypical Weekday Operation	Total Days Operated
Total vehicle miles operated	6,993,520	562,330	
Number of days	230	20	250
Average Weekday Total	**30,407**		

Average weekday total = 6,993,520 Actual vehicle miles / 230 days = ***30,407***

Example 2: How do I compute actual vehicle miles for average weekday total for DR? (Same system as in Example 1)

Solution: You calculate the mathematical average of total actual vehicle miles for total weekdays operated.

	Total Days Operated
Total vehicle miles operated	1,567,238
Number of days	250
Average Weekday Total	**6,269**

Average weekday total = 1,567,238 Actual vehicle miles / 250 days ***= 6,249***

Average Weekday Time Periods

You use average weekday time periods — Weekday AM Peak period, Weekday Midday period, Weekday PM Peak period and Weekday Other period —to report data on times service begins and ends and the average number of revenue vehicles

(passenger cars and trains) used during typical service for the year for selected modes. You should not report these data items for TR, DR, FB, JT, DT, and PB services.

In addition to reporting revenue vehicles by average weekday time periods, you must report passenger car revenue miles and unlinked passenger trips for weekday time periods if the mode is HR, CR, LR, YR, or SR.

Exhibit 46 — Requirements for Weekday Periods

Average Weekday Data Item Breakdown by Time Period	Line/Column	Non-Rail Modes Except Bus and Trolleybus	Bus and Trolleybus	Rail Modes Except Heavy Rail, Commuter Rail and Light Rail	Heavy Rail, Commuter Rail and Light Rail
Time service begins	Line 3, columns e, f and g	No	Yes	Yes	Yes
Time service ends	Line 4, columns e, f and g	No	Yes	Yes	Yes
Vehicles in operation	Line 6, columns e, f, g and h	No	Yes	N/A	N/A
Trains in operation	Line 5, columns e, f, g and h	N/A	N/A	Yes	Yes
Passenger cars in operation	Line 6, columns e, f, g and h	N/A	N/A	Yes	Yes
Passenger car revenue miles	Line 12, columns e, f, g and h	N/A	N/A	No	Yes
Unlinked Passenger Trips	Line 18, columns e, f, g and h	No	No	No	Yes

The average weekday time periods are defined based on the service operated by your transit agency. The number of vehicles in service is the determining factor for when peak service begins and ends. AM peak begins when the number of vehicles begins to ramp up in preparation for maximum morning service, and ends when all extra peak vehicles have left service.

For example:

- You operate 10 buses in early morning service;
- You begin sending out extra buses at 0530 up to a peak of 15 buses from 0700 to 0900; and
- You then start removing buses until you reach the midday level of 12 buses at 1015.

Based on this operation, your AM peak is from 0530 to 1015.

PM peak is determined using the same method. Use the “other” category, as appropriate, to provide information on night service operating after the PM peak and before the AM peak.

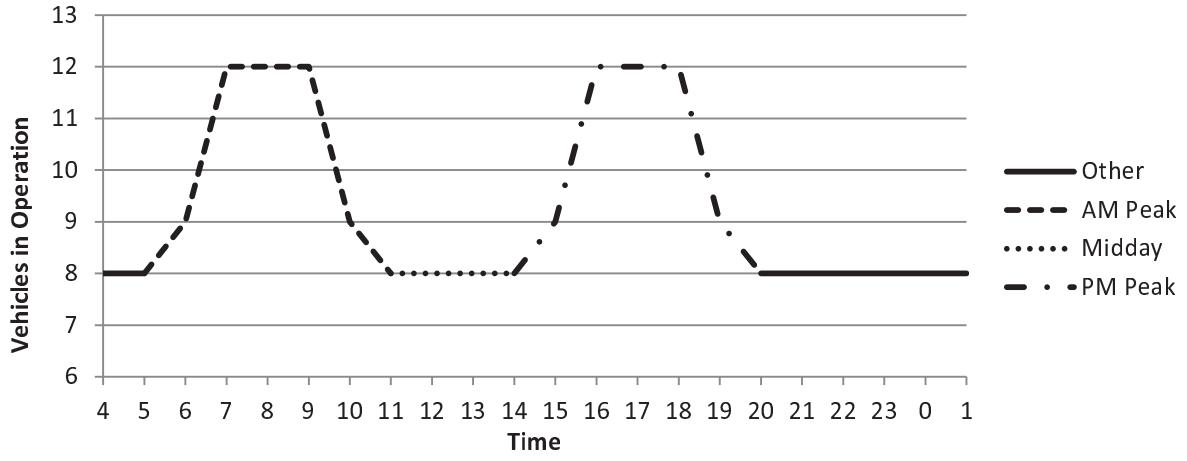
Your fare structure is not relevant to determining peak periods. If you charge higher fares during certain times of day, these times do not correspond to peak periods as defined in NTD.

You may define a one-way trip of a train as being either “peak” or “off-peak.” As such, it would not be necessary for you to determine when persons boarded an individual train trip and how you should add them to either “peak” or “off-peak” totals. Instead, you can define peak service using data for a complete one-way trip of a train.

The following example illustrates how to classify vehicle trips by period:

Exhibit 47 — Classifying Vehicle Trips by Period

Example: An agency operates light rail (LR) service. The hours of operation for weekdays are from 4:00 AM to 1:00 AM. The following graph depicts the peak periods for the service:



When a trip spans two periods, you may choose which classification is most appropriate.

Trip #	Day of the Week	Trip Departed at	Trip Arrived at	Peak Period
1	Monday	7:00 AM	7:30 AM	Weekday AM Peak
2	Tuesday	8:30 AM	9:00 AM	Weekday AM Peak
3	Wednesday	9:10 AM	9:40 AM	Weekday Other
4	Thursday	4:00 PM	4:30 PM	Weekday PM Peak
5	Friday	6:00 PM	6:30 PM	Weekday PM Peak
6	Monday	11:30 AM	12:00 PM	Weekday Midday
7	Tuesday	7:50 PM	8:20 PM	Weekday Other
8	Wednesday	4:55 AM	5:25 AM	Weekday AM Peak
9	Thursday	9:00 PM	9:30 PM	Weekday Other
10	Friday	6:00 AM	6:30 AM	Weekday AM Peak

Annual Totals

The annual totals are the total service for the year. Therefore, they include data for both typical and atypical days. Annual totals include:

Scheduled service + Extra service operated for special events - Scheduled service not operated for any reason

Scheduled service may not be operated for reasons such as:

- Driver and equipment shortages;
- Breakdowns; and
- Problems created by severe weather conditions.

The annual total fields equal:

The total number of weekdays, Saturdays, and Sundays of service × the corresponding data for an average weekday, Saturday and Sunday for typical days + corresponding data for atypical days.

The example below illustrates how to compute annual total data.

Exhibit 48 — Computing Annual Total Data

Example 1: How to compute the actual annual vehicle revenue miles and daily averages for MB

	Typical Weekdays	Atypical Weekdays	Typical Saturdays	Atypical Saturdays	Typical Sundays	Atypical Sundays
Total VRM	973,483	109,191	84,157	7,288	19,281	3,215
Days	231	23	49	4	50	8
Average VRM	4,214		1,717		386	

Solution:

Report total actual vehicle revenue miles operated = sum of first row = **1,196,615**

Report revenue miles on average weekday = typical weekday total / number of typical weekdays = **4,214**

Report revenue miles on average Saturday = typical Saturday total / number of typical Saturdays = **1,717**

Report revenue miles on average Sunday = typical Sunday total = number of typical Sundays = **386**

Report days operated: **254 weekdays, 53 Saturdays, 58 Sundays**

Example 2: How to compute the actual vehicle revenue miles for annual total and daily averages for DR.

	Weekdays	Saturdays	Sundays
Total VRM	348,645	24,628	16,799
Days	254	53	58
Average VRM	1,373	465	290

Solution: Report total actual vehicle revenue miles operated = sum of first row = **390,072**

Report revenue miles on average weekday = weekday total / number of weekdays = **1,373**

Report revenue miles on average Saturday = Saturday total / number of Saturdays = **465**

Report revenue miles on average Sunday = Sunday total / number of Sundays = **290**

Report days operated: **254 weekdays, 53 Saturdays, 58 Sundays**

Reporting for Rail and Non-Rail

The data for service supplied, the miles and hours of service operated, differ for rail and non-rail modes. Rail mode reporting captures information on both the passenger cars (the revenue vehicles that carry passengers) and the trains (grouping of passenger cars that travel as one unit). Typically, rail modes such as HR and LR have two or more cars in a train. Other rail modes, such as CC and IP have only one car in a train. YR and SR may have only one-car trains, or may have several cars in each train.

Detailed Instructions

You should report data by mode and TOS. You should complete one form for each directly operated (DO) mode and for each purchased transportation (PT) mode.

There are reduced reporting requirements for the demand response-taxi mode. Complete only annual total data listed below.

- Maximum Service Vehicles (Annual Total)
    - VOMS
    - Vehicles available for annual maximum service.

- Service Supplied (Annual Total)
    - Total VRM
    - Total VRH
- Service Consumed (Annual Total)
    - UPT
    - ADA unlinked passenger trips
    - Sponsored service unlinked passenger trips
    - PMT
- Service Operated (Days)(Annual Total):
    - Days Operated — days that service was actually operated
    - Days Not Operated Due to Strikes — days that service would normally have operated but was not due to a transit labor strike
    - Days Not Operated Due to Officially Declared Emergencies — days that service would normally have operated but was not due to an officially declared emergency.

The following detailed instructions are presented in the order that they appear on the form:

- Maximum service vehicles;
- Periods of service;
- Service supplied;
- Service consumed;
- Service operated; and
- DRM.

Maximum Service Vehicles

You should report the number of revenue vehicles required to meet and available for service requirements as:

- VOMS; and
- Vehicles available for annual maximum service.

Vehicles Operated in Annual Maximum Service

You should report the number of VOMS for the current year. When you enter this number of VOMS on the Identification form (B-10) the number transfers automatically to the S-10 form.

For CR, you should report **both passenger cars and the locomotives** used to pull them. You should report locomotives whether or not they are used to carry passengers in revenue service.

Vehicles Operated in Annual Maximum Service (VOMS): The number of revenue vehicles operated to meet the annual maximum service requirement. This is the revenue vehicle count during the peak season of the year on the week and day that maximum service is provided. In most instances, this is the number of scheduled vehicles since most transit agencies have sufficient vehicles to operate the scheduled service. VOMS exclude atypical days or one-time special events.

Vehicles Available for Annual Maximum Service

You should report the number of vehicles available for maximum service for the current year.

For CR, you should report both passenger cars and the locomotives used to pull them. You should report locomotives whether or not they are used to carry passengers in revenue service.

Exhibit 49 — Vehicles Operated in Maximum Service and Vehicles Available in Maximum Service		
Non-Rail Modes:	**Demand Response, Demand Response-Taxi and Vanpool**	**All other non-rail modes**
VOMS	The largest number of vehicles in revenue service at any one time during the reporting year (includes atypical service).	The largest number of scheduled revenue vehicles in service at any one time during the reporting year (excludes atypical service).
Vehicles Available for Annual Maximum Service	The largest number of vehicles in revenue service at any one time during the reporting year (includes atypical service) **and all spare vehicles available at this time.**	The largest number of scheduled revenue vehicles in service at any one time during the reporting year (excludes atypical service) **and all the spare vehicles available to provide both typical and atypical service.**
Rail Modes:	**Commuter Rail and Alaska Railroad**	**All other rail modes**
VOMS	The largest number of passenger cars and locomotives scheduled for service at any one time during the reporting year (excludes atypical service). Passenger cars and locomotives each count as a vehicle in this case.	The largest number of passenger cars (vehicles) scheduled for service at any one time during the reporting year (excluding atypical service).
Vehicles Available for Annual Maximum Service	The largest number of passenger cars and locomotives scheduled for service at any one time during the reporting year (excludes atypical service). Passenger cars and locomotives each count as a vehicle in this case, **and the total number of spare passenger cars and locomotives available to provide service.**	The largest number of passenger cars (vehicles) scheduled for service at any one time during the reporting year (excluding atypical service) **and all spare passenger cars available to provide service.**

Vehicles Available for Annual Maximum Service: The number of revenue vehicles available to meet the annual maximum service requirement. Vehicles available for maximum service include spare vehicles, out of service vehicles and vehicles in or awaiting maintenance, but **exclude vehicles awaiting sale and emergency contingency vehicles**.

Spare vehicles are needed to preserve and meet scheduled service. They are held in reserve to replace vehicles that break down or are involved in accidents. Spare vehicles also allow routine vehicle maintenance to be performed during the day when service is being operated.

Emergency contingency vehicles are inactive revenue vehicles that have reached their useful life and would normally be disposed of. However, FTA allows your transit agency to retain the vehicles in the event of energy or local emergencies (floods, earthquakes, etc.) if they are in an FTA approved emergency contingency plan.

Unless there were changes in the vehicle inventory during the report year, the number of vehicles available for maximum service should be consistent with the active revenue vehicles that you report on the Revenue Vehicle Inventory form (A-30).

The exhibit below illustrates the difference between VOMS and vehicles available for maximum service.

The following exhibit illustrates the difference between trains in operation and passenger cars in operation.

Exhibit 50 — Trains in Operation and Passenger Cars in Operation		
Rail Modes:	**Commuter Rail and Alaska Railroad**	**All other rail modes**
Trains in Operation	The largest number of locomotive/passenger car combinations scheduled to provide service on the average weekday/Saturday or Sunday Schedule (excludes atypical service) Example: One locomotive may pull three passenger cars and you should report this as one train.	The largest number of single passenger cars or set of adjoining passenger cars scheduled for service on the average weekday/Saturday or Sunday Schedule (excludes atypical service). Example: Three adjoining passenger cars would be one train and one passenger car with no adjoining cars would also be considered one train. If your transit agency operates only one passenger car at a time (single car trains), this number will be the same as passenger cars in operation.
Passenger Cars in Operation	The largest number of passenger cars (**excluding locomotives**) scheduled for service on the average weekday/Saturday or Sunday Schedule (excludes atypical service). If your transit agency operates only one passenger car at a time (single car trains), this number will be the same as trains in operation.	The largest number of passenger cars scheduled for the average weekday/Saturday or Sunday Schedule (excludes atypical service). If your transit agency operates only one passenger car at a time (single car trains), this number will be the same as trains in operation.

Periods of Service

You report service by the following time periods:

- Average Weekday Schedule (Whole day, Weekday AM peak, Week Midday and Weekday PM peak);
- Average Saturday Schedule (Whole day); and
- Average Sunday Schedule (Whole day).

You cannot report time period data for VP or DT service.

Time Service Begins

Report the beginning time for service on an average weekday by Weekday AM Peak period, Weekday Midday period, Weekday PM Peak period, and for the day. The beginning time for the day is defined as the time when the first revenue service vehicle leaves the garage or point of dispatch. Determine the peak periods on the basis of the number of vehicles in service, as described in Exhibit 47.

Report the beginning time (time service begins) for service on an average Saturday schedule and on an average Sunday schedule. Use 2400-hour time (e.g., 2:00 PM = 1400).

Report the normal periods of service for a continuous day of operation. For example, if service begins at 4:45 AM and the last service of the day ends at 2:00 AM the following day, report the periods of service for an average weekday as 0445 and 0200.

If you operate 24-hour service, you should report beginning and ending times of 0000 and 2359.

For TR, DR, FB, JT, and PB services, you should complete only the average weekday, Saturday and Sunday columns.

Time Service Ends

Report the ending times for service on an average weekday by Weekday AM Peak period, Weekday Midday period, Weekday PM Peak period and for the day. The ending time for the day is defined as the time when the last revenue service vehicle returns to the garage or point of dispatch.

Report the ending times (time service ends) for service on an average Saturday and on an average Sunday. Use 2400-hour time (e.g., 2:00 PM = 1400).

Report the normal periods of service for a continuous day of operation. For example, if AM peak service begins at 4:45 AM and the last service of the day ends at 2:00 AM the following day, report the periods of service for an average weekday as 0445 and 0200.

For TR, DR, FB, JT, and PB services, you should complete only the average weekday, Saturday and Sunday columns.

If you operate the same number of vehicles all day, you do not have peak service. Suppose your day starts at 0600 and ends at 1800. Enter 0600 as the time AM peak service begins, 1800 as the time PM peak service ends, and leave AM peak end, both midday fields, and PM peak beginning blank. Enter the number of vehicles operated for AM peak, Midday, and PM peak. Attach a form note to explain that you have no peak service.

Service Supplied

This section first provides a general discussion of the concepts relevant for reporting service supplied data. Detailed instructions for reporting service supplied data follow in the sections for rail and non-rail modes since they vary depending on whether the mode is a rail mode or a non-rail mode.

Key Service Supplied Concepts

Understanding the measures of service supplied and their components (e.g., deadhead, layover/recovery) will help you determine the appropriate category of vehicle miles and hours for reporting, including:

- Revenue service;
- Deadhead;
- Total service;
- Determining revenue and total service statistics; and
- Scheduled and actual service.

Revenue Service

Revenue service is when your transit vehicle is providing public transportation and is available to carry passengers. Revenue service excludes non-public transportation activities such as exclusive school bus service and charter service. Vehicles operated in fare free service are considered in revenue service.

You measure revenue service in terms of revenue hours and revenue miles. For non-rail services, the service measures are VRH and VRM. For rail services, there are two different types of measures — train revenue hours (miles) and passenger car revenue hours (miles).;

Revenue hours and miles for conventionally scheduled services, comprise two elements:

- Running time; and
- Layover/recovery time.

Running time is the time it takes your transit vehicle to travel from the beginning to the end of the transit route. Your agency's passenger timetable typically shows the running times for all trips operated by your agency unless you operate very frequent (e.g., buses every 5 minutes) service.

The layover/recovery time typically is scheduled at the end of each trip and usually ranges from 10 to 20 percent of the running time. The time is scheduled to provide the transit operator a rest break and to provide an opportunity to get the transit service back on schedule if it was running late on the last trip.

For DR service, the definition of revenue service is slightly different than that for conventionally scheduled service. Revenue time includes all travel time from the point of the first passenger pick-up to the last passenger drop-off, as long as the vehicle does not return to the dispatching point.

For DT service, revenue service is only the time spent carrying passengers.

Deadhead

Deadhead is the mileage and operating time needed to move your transit vehicle before revenue service begins and after revenue service ends. When transit vehicles are deadheading, they operate closed-door and do not carry passengers. Deadhead in fixed route services can involve travel between:

- The garage and the beginning of a route;
- The end of one route and the start of a second route; or
- The end of a route and the garage.

Note that deadhead for modes like bus (MB) includes mileage and time when your vehicle is not advertised as available for the general public, but is traveling to its first publicly advertised stop from the garage or to the garage from the last publicly advertised stop. For a vehicle to be considered in revenue service there must be a marked stop which is advertised in your schedules and an indication on your bus (e.g., head sign, window board) that it is in revenue service.

For non-fixed route services (DR, VP), deadheading can involve travel between:

- The garage and the dispatching point;
- The garage and the first passenger pick-up;
- The last passenger drop-off and the dispatching point;
- The last passenger drop-off and the garage; or
- The dispatching point and the garage.

Deadhead varies among non-scheduled, non-fixed route services:

- DR services typically operate some deadhead mileage and time.
- VP services rarely operate deadhead time and mileage because typically vanpool vehicles start and end at the homes of drivers which are the first passenger pick-up points and last passenger drop-off points.
- For DT services, while taxicab providers may operate some deadhead, NTD collects only revenue service miles and hours. Taxicab service is typically paid for a passenger trip from origin to destination (for the revenue part of the trip).

Deadhead does not include vehicle travel during other times when vehicles are not available to the general public. Examples include non-public transportation activities such as charter or exclusive school bus service and internal transit activities such as operator training and moving vehicles between maintenance or operations facilities.

Deadheading also does not cover fueling operations. Some transit system do not have fueling facilities at their maintenance facilities or parking lots and may have their drivers fuel their vehicles on the way back to the garage after they have completed their day's work. You should not include the time that the drivers spend fueling their vehicles as part of deadhead time (hours).

Total Service

Total service covers the time from when your transit vehicle starts (pull-out time) from a garage to go into revenue service to the time it returns to the garage (pull-in time) after completing its revenue service. Since total service covers the time between pull-out and pull-in, it therefore **includes both deadhead and revenue** service.

You measure total service in terms of hours and miles. For non-rail services, the service measures are vehicle hours and vehicle miles. For rail services, there are two types of measures: train hours (miles) and passenger car hours (miles).

Determining Revenue and Total Service Statistics

You can calculate revenue and total service hours (miles) by examining the schedule for each of your agency's revenue vehicles, commonly known as a vehicle block. The example below illustrates how to calculate the vehicle revenue hours (miles) and vehicle hours (miles) for a bus vehicle block.

Exhibit 51 — Calculating Vehicle Revenue and Vehicle Hours and Miles for Peak Periods

Example: How do I compute vehicle revenue and vehicle hours and miles for a morning rush hour trip?

Starting Location	Ending Location	Start Time	End Time	Time (Min)	Dist. (Miles)	Activity
Garage	Route 22 suburban end	6:30 AM	6:35 AM	5	2.0	Deadhead time
Route 22 suburban end	Route 22 downtown end	6:35 AM	7:25 AM	50	15.3	Running end time
Route 22 downtown end	Route 22 downtown end	7:25 AM	7:35 AM	10	0.0	Layover/recovery time
Route 22 downtown end	Route 22 suburban end	7:35 AM	8:25 AM	50	15.3	Running time
Route 22 suburban end	Garage	8:25 AM	8:30 AM	5	2.0	Deadhead time

Solution:

Vehicle revenue hours / miles = running time plus layover / recovery time

VRH = (50 + 10 + 50) / 60 = 110 / 60 = **1.83**

VRM = 15.3 + 15.3 = **30.6**

Vehicle hours / miles = running time plus layover / recovery time plus deadhead time

Vehicle hours = (5 + 50 + 10 + 50 + 5) / 60 = 120 / 60 = **2.0**

Vehicle miles = 2.0 + 15.3 + 15.3 + 2.0 = **34.6**

Scheduled and Actual Service

Scheduled service refers to the service that your agency planned to operate. Generally, this service is detailed in internal agency documents and provided to the users in public timetables.

Depending on the mode, you should report different scheduled statistics. For scheduled, non-rail services, the service measure is scheduled vehicle revenue miles. For rail services, the service measure is scheduled passenger car revenue miles. You should report scheduled service statistics only for scheduled services and therefore, you should not report for DR, VP, JT, and PB services.

Actual service refers to the service that your transit agency operated during the reporting period. The amount of actual service usually is very close to the amount of scheduled service. **The difference between actual and scheduled service is due to two types of operating changes**:

- **Missed service** that occurred because of shortages of operators and revenue vehicles, vehicle breakdowns, weather related cancellations of service, and other service interruptions; and
- **Added service** operated as needed to meet the expected high ridership for special events such as fairs, parades, and civic celebrations. Note that this added service should be reported in the annual total, but not the daily average.

Except for scheduled vehicle revenue miles (non-rail) and scheduled passenger car revenue miles, you must report actual service data in the service supplied portion of this form.

Service Supplied (Non-Rail Modes) Instructions

The reporting requirements for service supplied data vary by the two types of service operated:

- Scheduled fixed route: TR, MB, CB, RB, FB, JT, PB, and TB; and
- Non-scheduled, non-fixed route services: DR, DT and VP

Scheduled Fixed Route Services

For scheduled, fixed route services (TR, MB, CB, RB, FB, JT, PB, and TB), service supplied data for the average daily schedules cover the service typically (or commonly) operated by your transit agency. The average daily schedule values do not include:

- Service operated by your transit agency for one-time or limited events such as day of the game football shuttles or a visit to the city by the President of the United States; or
- Extra service operated in addition to the service public timetable by your transit agency to meet anticipated higher demand for limited season travel such as holiday shopping or county fairs.

Report service supplied data for the average day schedules (weekday, Saturday and Sunday) and for the annual total.

Vehicles in Operation

Report the vehicles in operation for service that is typically operated by your transit agency. These are the maximum number of vehicles necessary to actually operate service **excluding atypical days**.

In addition to average daily schedule data, for MB and TB, report vehicles in operation for the Weekday AM Peak, Weekday Midday, weekday PM Peak, and Weekday Other time periods.

Actual Vehicle Miles and Hours, Actual Vehicle Revenue Miles and Hours, Deadhead Miles and Hours

Report average daily schedule and annual total data for actual vehicle miles, actual vehicle hours, VRM and VRH. Actual vehicle revenue miles and hours are when the service is available to the general public. These are the miles and hours traveled by vehicles in carrying passengers, plus layover/recovery time. It does not include the miles and hours for items such as deadhead, charter services, school bus service, operator training or maintenance testing.

The following exhibit illustrates how to report hours and miles for a vehicle in fixed route service.

Exhibit 52 — Accounting for Miles and Hours for Bus Service

Activity	Actual Vehicle		Vehicle Revenue	
	Hours	Miles	Hours	Miles
Bus travels (deadheads) from dispatching point to start of route.	Yes	Yes	No	No
Bus travels its route in scheduled revenue operation. Passengers board the vehicle.	Yes	Yes	Yes	Yes
Bus travels its route in scheduled revenue operation. No passengers board the vehicle.	Yes	Yes	Yes	Yes
Bus arrives at the end of the route, lays over. Passengers can board during layover.	Yes	N/A	Yes	N/A
Bus arrives at the end of the route, lays over. Passengers cannot board during layover.	Yes	N/A	Yes	N/A
Bus arrives at the end of the route, goes out of service. Resumes service in PM peak.	No	No	No	No
Bus arrives at the end of the route, travels (deadheads) and parks at storage lot.	Yes	Yes	No	No
Bus arrives at the end of the route, travels (deadheads) to another route to operate a scheduled trip. Passengers cannot board during deadhead.	Yes	Yes	No	No
Bus arrives at the end of the route, travels (deadheads) to the dispatching point.	Yes	Yes	No	No
From the garage the bus travels to another maintenance facility to perform routine maintenance.	No	No	No	No
Due to a collision with another vehicle, the trip is terminated and the bus travels to a maintenance facility.	Yes	Yes	No	No
Bus travels from start to end of a route for training. Vehicle is not in service and does not board passengers.	No	No	No	No
The driver fuels the vehicle at a gas station.	No	N/A	No	N/A

The S-10 form automatically calculates deadhead miles (line 12a) and deadhead hours (line 15a) based on the data you reported for actual vehicle miles, actual vehicle hours, VRM and VRH. The automatic calculations are made as follows:

- Deadhead miles (line 12a) are calculated as total actual vehicle miles (line 11) minus total actual vehicle revenue miles (line 12) by column; and
- Deadhead hours (line 15a) are calculated as total actual vehicle hours (line 14) minus total actual vehicle revenue hours (line 15) by column.

These calculations are provided to help you judge the reasonableness of the data that you are reporting for the average day schedules and for the annual totals.

Scheduled Vehicle Revenue Miles

Report scheduled vehicle revenue miles directly from your schedules, excluding any service interruptions or special additional services. Average weekday schedule data are the sum of the scheduled service offered during all time segments of a typical weekday.

Charter Service and School Bus Hours

Report charter service hours and school bus hours. Charter and school bus service are not open to the general public, but serve a select group.

School bus service means the exclusive use of vehicles for carrying students. It does not mean additional services (school trippers) that your transit agency may operate on an existing route to meet the demands of traveling students. You should report school trippers as part of revenue service.

Most transit agencies operate no or very limited charter and school bus service.

Modes Using Ferryboat Service

The reporting of FB service has unique reporting requirements when other transportation modes also utilize the FB service. These other transportation modes may be other public transit modes such as VP and MB, or they may be private vehicles such as automobiles.

The following rules apply:

- Vehicle miles traveled on the ferryboat should be reported only for FB mode, not for the other mode (e.g. MB) that rides it; and
- Vehicle hours elapsed on the ferryboat should be reported in other modes like layover time, i.e. as revenue service.

Non-Scheduled Non-Fixed Route Services

In the following, reporting instructions are given for three types of non-scheduled services:

- DR;
- DT; and
- VP.

The reporting of average daily totals is different for DR, DT, and VP than it is for scheduled, fixed route services. For DR and VP services (non-fixed route, non-scheduled), the average daily totals cover all days operated — typical and atypical. For DT, report all days operated — typical and atypical — only for the annual total.

Vehicles in Operation

Report the vehicles in operation for service that your transit agency operated. These are the maximum number of vehicles necessary to actually operate the DR, DT, or VP service.

Actual Vehicle Miles and Hours, Actual Vehicle Revenue Miles and Hours, Deadhead Miles and Hours

Report average daily and annual total data for actual vehicle miles, actual vehicle hours, VRM and VRH. This is when the service is available to the general public. **For DR service, VRM and VRH include all travel and time from the point of the first passenger pick-up to the last passenger drop-off**, as long as the vehicle does not return to the dispatching point. In addition, VRM and VRH include the distance and time to pick-up the next passenger. Thus, actual vehicle miles and hours are usually only slightly larger than actual VRM and VRH.

For DT service, you report only annual totals for VRM and VRH. For DT services, while taxicab providers may operate some deadhead, NTD collects only revenue service miles and hours. Taxicab service is typically paid for a passenger trip from origin to destination (for the revenue part of the trip).

Exhibit 53 below illustrates how to report hours and miles for a vehicle in DR and DT service.

Exhibit 53 — Accounting for Miles and Hours for Demand Response Service

Activity	Actual Vehicle Hours	Actual Vehicle Miles	Vehicle Revenue Hours	Vehicle Revenue Miles
Vehicle idles at the dispatching point.	No	N/A	No	N/A
Vehicle departs dispatching point to pick-up a passenger.	Yes	Yes	No	No
Vehicle waits for a passenger at the pick-up point.	Yes	N/A	Yes	N/A
After a passenger drop-off, the vehicle departs to pick-up another passenger with no passengers on-board.	Yes	Yes	Yes	Yes
After a passenger drop-off, the driver travels to a restaurant for lunch.	Yes	Yes	No	No
The driver eats his lunch at a restaurant.	No	N/A	No	N/A
Vehicle transports passengers from a community center to a shopping mall.	Yes	Yes	Yes	Yes
Vehicle returns to the dispatching point with no passengers on-board.	Yes	Yes	No	No
Vehicle waits at the dispatching point before returning to shopping mall.	No	N/A	No	N/A
Vehicle waits at the shopping mall until it is time to bring passengers back to the community center.	Yes	N/A	Yes	N/A
The driver fuels the vehicle at a gas station.	No	N/A	No	N/A

For VP, in most cases the driver is considered a passenger since he also is traveling to destination for work or other trip purpose. Since the driver is a passenger, you report the travel from the driver's home to the first passenger pick-up and the travel from the last passenger drop-off in VRM and VRH.

For VP do not report travel to or from a maintenance facility, and do not report the driver's personal use of the vehicle in vehicle miles and hours.

Therefore, for vanpool services, in most cases, no deadhead hours or miles are operated and reported because: 1) the drivers are also passengers and 2) most vanpool vehicles are stored at the homes of passenger drivers. Since no deadhead hours or miles are operated, the following relationships will occur:

- Total Actual Vehicle Miles = Total Actual Vehicle Revenue Miles; and
- Total Actual Vehicle Hours = Total Actual Vehicle Revenue Hours.

The S-10 form automatically calculates deadhead miles (line 12a) and deadhead hours (line 15a) based on the data you reported for actual vehicle miles, actual vehicle hours, VRM and VRH. The automatic calculations are made as follows:

- Deadhead miles (line 12a) are calculated as total actual vehicle miles (line 11) minus total actual vehicle revenue miles (line 12) by column; and
- Deadhead hours (line 15a) are calculated as total actual vehicle hours (line 14) minus total actual vehicle revenue hours (line 15) by column.

These calculations are provided to help you judge the reasonableness of the data that you are reporting for the average day schedules and for the annual totals.

Scheduled Vehicle Revenue Miles

You do not report these data because DR, DT and VP are non-scheduled services.

Charter Service and School Bus Hours

Report charter service hours and school bus hours operated for DR and VP mode. Charter and school bus service are not open to the general public, but serve a select group.

School bus service means the exclusive use of vehicles for carrying students. It does not mean additional services (school trippers) that your transit agency may operate on an existing route to meet the demands of traveling students. Report these added school trippers as part of revenue service.

Transit agencies rarely operate charter or school bus service using the DR, DT or VP modes.

Service Supplied (Rail Modes) Instructions

Reporting for rail modes requires separate data for trains and for the passenger cars of each train. A train is simply a group of passenger cars that move as one unit. For CR mode, a train includes the locomotive that pulls the passenger cars even though the locomotive may or may not carry passengers. For some rail modes, such as HR and LR, a train consists of one or more passenger cars. For other rail modes, there may be only one car per train, such as CC, or IP.

You must report service supplied data for average schedule days (weekday, Saturday and Sunday) and for the annual total. In addition, for HR, LR, CR, YR, and SR, you must report average weekday schedule data by time period for the following items:

- Passenger car revenue miles; and
- Unlinked passenger trips.

Trains and Passenger Cars in Operation

Report the number of trains in operation and passenger cars in operation for service that your transit agency typically operated. These are the maximum number of trains and passenger cars necessary to actual operate service excluding atypical days. In addition to average daily data, report vehicles in operation for the weekday AM peak, midday, PM peak, and other time periods.

Actual Train and Passenger Car Miles and Hours, Actual Train and Passenger Car Revenue Miles and Hours, Train and Passenger Car Deadhead Miles and Hours

Report actual train miles, actual train hours, actual train revenue miles and actual train revenue hours; and actual passenger car miles, actual passenger car revenue miles, actual passenger car hours and actual passenger car revenue hours. For CR mode, do not include locomotive miles when reporting passenger car miles and hours.

Examples of how these statistics are computed are shown in the following exhibit.

Exhibit 54 — Calculating Actual Train and Passenger Car Statistics

Example: A commuter rail (CR) train makes one round trip in the morning. The train consists of one locomotive and six passenger cars.

Starting Location	Ending Location	Start Time	End Time	Time (Minutes)	Distance (Miles)	Activity
Maintenance facility	Line A suburban end	5:30 AM	5:40 AM	10	3.0	Deadhead time
Line A Suburban end	Line A downtown end	5:40 AM	7:00 AM	80	32.6	Running time
Line A downtown end	Line A downtown end	7:00 AM	7:20 AM	20	0.0	Layover/recovery time
Line A downtown end	Line A suburban end	7:20 AM	8:40 AM	80	32.6	Running time
Line A suburban end	Maintenance facility	8:40 AM	8:50 AM	10	3.0	Deadhead time

Train miles / hours = Deadhead time + Running time + Layover / recovery time

Train miles = 3.0 + 32.6 + 32.6 + 3.0 = **71.2**

Train hours = (10 + 80 + 20 + 80 + 10) / 60 = 200 / 60 = **3.3**

Train revenue miles / hours = Running time + Layover / recovery time

Train revenue miles = 32.6 + 32.6 = **65.2**

Train revenue hours = (80 + 20 + 80) / 60 = 180 / 60 = **3.0**

Passenger car miles / hours = (Deadhead time + Running time + Layover / recovery time) x Number of passenger cars

Passenger car miles = (3.0 + 32.6 + 32.6 +3.0) x 6 = 71.2 X 6 = **427.2**

Passenger car hours = [(10 + 80 + 20 + 80 + 10) X 6] / 60 = [200 X 6] / 60 = 1,200 / 60 = **20.0**

Passenger car revenue miles / hours = (Running time + Layover / recovery time) x Number of passenger cars

Passenger car revenue miles = (32.6 + 32.6) x 6 = 65.2 x 6 = **391.2**

Passenger car revenue hours = [(80 + 20 + 80) x 6] / 60 = [180 x 6] / 60 = 1,080 / 60 = **18.0**

The S-10 form automatically calculates train and passenger car deadhead miles and deadhead hours based on the data you reported for actual miles, actual revenue miles, actual hours and actual revenue hours. The automatic calculations are made as follows:

- Train deadhead miles (line 9a) are calculated as total actual train miles (line 07) minus total actual train revenue miles (line 09) by column;
- Train deadhead hours (line 10a) are calculated as total actual train hours (line 08) minus total actual train revenue hours (line 10) by column;
- Passenger car deadhead miles (line 12a) are calculated as total actual passenger car miles (line 11) minus total actual passenger car revenue miles (line 12) by column; and
- Passenger car deadhead hours (line 15a) are calculated as total actual passenger car hours (line 14) minus total actual passenger car revenue hours (line 15) by column.

These calculations are provided to help you judge the reasonableness of the data that you are reporting for the average day schedules and for the annual totals.

Scheduled Passenger Car Revenue Miles

Report scheduled passenger car revenue miles directly from your schedules, excluding any service interruptions or special additional services. Average weekday schedule data are the sum of the scheduled service offered during all time segments of a typical weekday.

The following exhibit illustrates how to report hours and miles for rail modes.

Exhibit 55 — Accounting for Miles and Hours for Rail Service

Activity	Actual Vehicle Hours	Actual Vehicle Miles	Vehicle Revenue Hours	Vehicle Revenue Miles
Train travels (deadheads) from the yard to the station where the trip is scheduled to start.	Yes	Yes	No	No
Train departs from the yard and travels to an adjacent station. The transit agency states that the train is in revenue service, however, no passengers are allowed to board.	Yes	Yes	No	No
Train travels from beginning to end of the line carrying passengers.	Yes	Yes	Yes	Yes
Train completes trip, lays over. Passengers cannot board during layover.	Yes	N/A	Yes	N/A
Train completes trip, lays over at a maintenance facility adjacent to the station. Passengers cannot board during layover.	Yes	Yes	Yes	Yes
Train completes trip, lays over. Passengers can board during layover.	Yes	N/A	Yes	N/A
Train departs from station A, breaks down at station B. Trip is terminated. Passengers alight at station B to board the next train. Trip operated from station A to station B.	Yes	Yes	Yes	Yes
Trip not operated beyond station B.	No	No	No	No
Train departs from station A, short turns at station B. Passengers alight at station B and board the next train. Trip operated from station A to station B.	Yes	Yes	Yes	Yes
Trip not operated beyond station B.	No	No	No	No
Train departs from station A, is expressed from station B to the end of the line. Passengers on-board can only alight at Station B or at end station. Trip operated from station A to station B.	Yes	Yes	Yes	Yes
Trip operated non-stop beyond station B.	Yes	Yes	Yes	Yes
Train completes a trip, deadheads to the end of another line to make another trip.	Yes	Yes	No	No
In the transition from AM to midday service, the train is put out of service at the end station. Service will resume for PM peak.	No	N/A	No	N/A
In the transition from AM to midday service, the train travels (deadheads) to the yard.	Yes	Yes	No	No
Train travels for operators' training and no passengers are allowed to board.	No	No	No	No
Train travels from the yard to a maintenance facility.	No	No	No	No

Service Consumed

Service consumed data are measures of the use of public transportation. NTD collects data on two measures:

- UPT; and
- PMT.

In addition, for DR and DT service, NTD collects two types of UPT:

- Americans with Disabilities Act of 1990 (ADA) related unlinked passenger trips (line 19) are complementary paratransit trips provided under the ADA requirements; and
- Sponsored service unlinked passenger trips (line 19a) are paid in whole or part by a third party who, in many cases, handles all or part of the trip arrangements.

You report only annual totals for these two special types of UPT. Counts of these two special types are included in the annual total you reported for unlinked passenger trips (line 18). Trips may be categorized as either ADA or sponsored, but **not both**.

For FB mode, there are also unique NTD reporting requirements for reporting UPT and PMT when other transportation modes also utilize the FB service. These other transportation modes may be other public transit modes such as VP and MB, or they may be private vehicles such as automobiles.

The following rules apply for FB mode reporting:

- Report UPT for each occupant of the vehicle including the driver, whether the other transportation mode is public transit or private vehicles; and
- Report PMT only once, because the other public transit or private vehicle is not moving under its own power aboard the FB.

See also discussion above for reporting vehicle miles and hours, and in the F-10 form for reporting passenger fares and FB ferriage fees.

Unlike all other data reported in the NTD, you may estimate PMT and UPT based on a sampling procedure. Acceptable sampling procedures and requirements are discussed at the end of this section.

Unlinked Passenger Trips

You should report UPT (boardings) for the average weekday schedule, average Saturday schedule, average Sunday schedule, and the annual total. UPT are the number of passengers who board your public transportation vehicles. You should count passengers each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.

For DT mode, report only the annual total UPT.

For DR and DT modes, you should report personal care attendants and companions as long as they are not employees of your transit agency. You should report attendants and companions regardless of whether or not they are fare-paying passengers.

For YR, SR, HR, LR and CR, you should report average weekday unlinked passenger trips by time period (Weekday AM Peak, Weekday Midday, Weekday PM Peak, and Weekday Other).

If your transit agency operates complementary paratransit trips, you should report the number of the unlinked trips attributable to ADA requirements (including personal care attendants and companions) under the DR and DT modes. These UPT should be less than or equal to the UPT you reported for the DR or DT service (line 18).

If your transit agency carries sponsored service trips, you should report the number of the sponsored service unlinked trips under the DR mode. These UPT should be less than or equal to the UPT you reported for the DR or DT service (line 18).

The categories of ADA-related and sponsored service **are exclusive**. These kinds of trips **cannot** overlap. Each is a separate subset of the unlinked passenger trips. The total of ADA-related unlinked passenger trips and sponsored service unlinked passenger trips cannot exceed the total unlinked passenger trips.

For VP service, commonly you should report the driver as a passenger since most drivers are not paid wages and they are commuting to work. However, in rare instances, you should consider the drivers employees because, like other transit operators, they are paid wages and are not traveling for personal reasons (e.g., work commuting, shopping).

For rail systems, you should not confuse UPT with counts of passengers entering the systems through fare turnstiles. Often, rail systems allow passengers to transfer from one train to another train without exiting the rail system. In these systems, the turnstile counts always will be less than unlinked passenger counts because the turnstile counts do not include counts of boarding transfer passengers.

Passenger Miles Traveled Data

Report PMT for an average weekday schedule, average Saturday schedule, average Sunday schedule, and the annual total. PMT is the other measure of service consumed by transit users. This measure tracks the distance traveled by each passenger, i.e., the distance from the time he boards until he gets off the vehicle. PMT are the cumulative sum of the distances ridden by each passenger.

For DT mode, report only the annual total PMT.

Sampling Procedures and Requirements for Passenger Miles Traveled and Unlinked Passenger Trips

The counting of all unlinked passenger trips or all passenger miles traveled consumed is called a 100 percent count**. If available and reliable, you must report 100 percent counts of either or both PMT and UPT**. This requirement applies to all modes and types of service.

If 100 percent counts are not available and reliable, you must estimate and report the PMT and UPT values based on statistical sampling. The Federal Transit Administration (FTA) requirements for all modes and types of service are:

- Minimum confidence of 95 percent; and
- Minimum precision level of ±10 percent.

The required precision level (±10 percent) applies to the annual total, not the average day schedule estimates that you report. The precision levels for the average day schedule estimates will be greater than ±10 percent if the sample size for the annual count was designed to meet ±10 percent exactly.

PMT and UPT are important NTD data items. The accuracy of the reported PMT and UPT must be certified in the Chief Executive Officer (CEO) Certification.

The 100 percent count method and sampling requirements and procedures are discussed below.

100 Percent Count of Unlinked Passenger Trips and Passenger Miles Traveled

A 100 percent count of UPT involves counting passengers each time they board a vehicle. As part of this count, the distance traveled by each passenger may also recorded to produce a 100 percent count of PMT. These two types of 100 percent counts are generally applicable to smaller systems, but their use is not precluded by a system's size. If 100 percent counts are available and reliable for either UPT or PMT, you must report them.

Your transit agency may try to do a 100 percent count and may miss some of the vehicle trips because of personnel problems or equipment failures. If these vehicle trips are two percent or less of the total, then you should factor up the data to account for the missing percentage. If the missed vehicle trips are more than two percent of the total, then you must have a qualified statistician approve the methodology for factoring the data to account for the missing percentage.

Passenger Miles Traveled Sampling

Your transit agency may use any data sampling technique, by mode and TOS, which meets the 95 percent confidence and ±10 percent precision levels. Your transit agency may use different sampling techniques for each mode/TOS combination.

To assist transit agencies, FTA has developed acceptable PMT and UPT sampling procedures for all modes. Your transit agency may also use any other procedure (alternative technique) that meets FTA requirements.

If your transit agency samples, you must follow the sampling technique exactly. You may choose to oversample your data, provided that the oversampling is selected randomly from all vehicle runs operated. However, you may not in any case collect a smaller sample than is prescribed by the sampling plan. You should not change: 1) the prescribed number of trips in the sample except to randomly oversample or 2) the approach for selecting trips that comprise the sample.

The following items are discussed below:

- FTA approved sampling techniques;
- Alternative sampling techniques;
- Automatic Passenger Counters;
- Sampling for PT service;
- Sampling cycles — mandatory sampling years; and
- CEO certification of sampling techniques and data.

FTA Approved Sampling Techniques

There are three approved sampling techniques described in circulars that provide definitions, sampling procedures, data recording procedures, annual report compilation and sample selection information:

1. **National Transit Database Sampling Manual**. FTA issued this manual in 2009 to help transit agencies prepare sampling plans that are tailored to their operating environment. The manual covers the development of sampling plans for all modes. If data are not available for a particular mode, default sampling plans are provided. If data are available, then customized sampling plans can be developed using downloadable templates.

   The Sampling manual can be downloaded from the NTD Program website (www.ntdprogram.gov/ntdprogram/sampling.htm/ntdprogram/sampling.htm).

   You do not need to get approval from FTA nor from a qualified statistician to use the approaches outline in the manual unless you are using APC's to collect your data—in which case the usual APC approval requirements apply.

2. **FTA C 2710.1A Sampling Techniques for Obtaining Fixed Route Bus Operating Data Required under the Section 15 Reporting System**. Six sampling plans are presented. The minimum number of sample trips is 549 annually. The six sampling plans are for systems that operate daily service. If your transit agency does not operate on a seven-day schedule you should contact their NTD analyst for assistance. You should not submit the documentation outlined in the circular with your NTD Annual report, but retain it for your files.

   This procedure was developed to provide an estimate of both PMT and UPT for fixed route bus systems. However, if a 100 percent count of UPT is available and reliable you cannot report the procedure's estimate for UPT. Instead

FTA requires you to report the available 100 percent count of UPT. In this case, you should only use the procedure to estimate and report PMT.

This circular can be downloaded from the NTD Program website (www.ntdprogram.gov/ntdprogram/reference.htm).

3. **FTA C 2710.2A Sampling Procedures for Obtaining DR Bus System Operating Data Required under the Section 15 Reporting System.** The circular describes a method for sampling the service provided by one demand response (DR) vehicle on one day each week. The method is used to estimate annual passenger miles traveled (PMT) and requires your transit agency to collect 100 percent counts of UPT. The sampling circular includes the Annual Report to FTA —DR form (406B). You should not submit this form with your NTD Annual report, but retain it for your files.

   This circular can be downloaded from the NTD Program website (www.ntdprogram.gov/ntdprogram/reference.htm/ntdprogram/reference.htm).

Alternative Sampling Techniques

Your transit agency may also use any other procedure (alternative technique) approved by a qualified statistician. An alternative sampling technique is a statistically valid technique, other than a 100 percent count of both UPT and PMT and other than the sampling techniques described in the National Transit Database Sampling Manual or the two FTA circulars.

A qualified statistician is someone who can ensure that FTA statistical sampling requirements are met. FTA does not prescribe specific statistician qualifications. Instead, it requires your transit agency to ensure that the statistician is suitably qualified. The statistician may be an in-house staff person with a working knowledge and an education or background in statistics. The statistician also may be a hired consultant with appropriate qualifications.

FTA does not review or approve alternative sampling techniques. A qualified statistician must design the sampling technique to meet FTA's confidence and precision levels.

You must document and retain in your files both the technique and the statistician's approval. The documentation should include:

- A description of the technique that specifies the parameters used to estimate UPT (e.g., UPT per vehicle trip x number of vehicle trips operated) if a 100% count of UPT is not available or reliable, and PMT (e.g., PMT per vehicle trip x number of vehicle trips operated), and the rationale used to estimate the coefficient(s) of variation;
- A signed review of the technique by a qualified statistician including a statement that the technique meets FTA's confidence and precision levels; and
- A summary of the statistician's education and experience that indicates that the statistician is qualified.

FTA considers FTA C 2710.4A Revenue Based Sampling Procedures for Obtaining Fixed Route Bus (MB) Operating Data Required under the Section 15 Reporting System an alternative sampling technique. If your transit agency uses C 2710.4A you must have a qualified statistician review, revise (if necessary), and approve the sampling parameters.

Automatic Passenger Counters (APC)

Some transit agencies use automatic passenger counters (APC) for collecting UPT and PMT data either through sampling or a 100 percent count of data. The APCs must be calibrated and validated by each transit agency annually in order to be used for NTD reporting.

The use of APCs for NTD reporting requires prior FTA approval. If your transit agency has failed to obtain prior FTA approval, FTA may not include the reported APC-derived passenger mile data in the Urbanized Area Formula Program apportionment.

FTA approval is required for the following:

- Implementation of a new APC system;
- APC benchmarking plan for the first year; and
- APC maintenance plan for subsequent years.

The APC benchmarking plan for the first year must include:

- Validation of the APC data for UPT and PM data against a separate data sample covering a full year; and
- Development of procedures, as necessary, for adjusting the APC data for UPT and PMT to replicate the data produced through the manual sampling.

If you wish to use an APC to collect PMT data, then the APCs should be run parallel to traditional manual sampling for one year. Adjustment procedures will ensure that adjusted APC data are statistically equivalent to the manual sampling.

You must submit the benchmarking plan to FTA for approval using the **e-File** tab in Internet Reporting. You also must submit the results after the benchmarking plan has been completed using the **e-File** tab in Internet Reporting.

In subsequent years, the APC maintenance plan must include procedures for the calibration of the APC equipment every year. The plan should use a sample of at least 100 bus vehicle trips using ride checkers to collect the UPT and PM data. The trips in the sample do not need to be randomly distributed by route, by day, and time of day. If a transit system uses APCs for both directly operated and purchased transportation bus services, separate samples of at least 100 bus vehicle trips are required for each type of service.

You must annually submit to FTA documentation of the results of the maintenance plans. This documentation should include an analysis of the UPT and PM data collected by manually by ride checkers as compared to APC derived UPT and PM data. It should examine the statistical variance between the two data sets. You should submit the documentation to NTD using the using the **e-File** tab in Internet Reporting.

Sampling for Purchased Transportation Service

Rules have been developed for sampling PT services when your agency, the buyer, also operates the same mode of service and when there is more than one seller. NTD establishes the following guiding sampling rules for PT services:

- PT sellers may use different sampling techniques than those implemented by your transit agency for DO service; and
- Your transit agency may apply one sample technique covering all PT contracts for a specific mode or each PT seller may use a separate sampling technique.

Sampling Cycles

FTA has set minimum one-year or three-year sampling cycles for transit agencies. The requirements are based on primary urbanized area (UZA) size, number of VOMS and TOS. 2010 US Census defines the UZAs.

Sampling Cycle Requirements

Transit agencies must sample every year (one-year sampling cycle) for mode/TOS services that meet the following three requirements:

- The services are directly operated;
- The reporting transit agency serves a primary UZA with 500,000 more population; and
- The reporting transit agency directly operates a total of 100 or more vehicles in annual maximum service across all modes.

Transit agencies are permitted to sample every three years (three-year sampling cycle) for mode/TOS services that meet the following two requirements:

- The transit agencies collect 100 percent counts of UPT every year for the mode/TOS; and
- One of the following conditions is met:
    - The transit agency directly operates across all modes, a total that is less than 100 or more vehicles in annual maximum service;
    - The transit agency serves a primary UZA with less than 500,000 population; or
    - The service type (TOS) is purchased transportation (PT).

If a transit agency wishes to sample every three years, it must collect sample data in the FTA -defined mandatory years. The next mandatory year is 2014.

The exhibit below summarizes the FTA sampling cycle requirements.

Exhibit 56 — Sampling Cycle Requirements

TOS	Primary UZA Population	DO VOMS All Modes	Mandatory Year Frequency	100% Count of UPT Required?	Mandatory Year
DO	≥ 500,000	≥ 100	Every year	No	2013
DO	≥ 500,000	< 100	Every 3rd year	Yes	2014
DO	50,000 – 499,999	Any number	Every 3rd year	Yes	2014
PT	≥ 50,000	Any number	Every 3rd year	Yes	2014

If your transit agency is reporting for the first time or if your transit agency started a new mode/TOS during the report year, you must sample during your first report year even if it is not your mandatory year. Your next mandatory year occurs in the next fixed cycle for your transit agency. Similarly, if your agency is an existing reporter but missed a mandatory sampling year, you must sample the next report year and your next mandatory year occurs in the next fixed cycle for your transit agency.

Note that only the primary UZA is relevant. If your primary UZA is under 500,000 population, but you secondarily serve a UZA over 500,000, you should sample every 3rd year.

You must keep your sampling data on file for at least 3 years, so it can be reviewed in FTA's triennial review.

Reporting in Non-Mandatory Sampling Years

If you are following a three-year sampling cycle for a specific mode/TOS, you must estimate PMT data by multiplying: 1) the average trip length (PMT divided by UPT) statistics reported in the annual total from the mandatory year and 2) the UPT (for weekday schedule, Saturday schedule, and Sunday schedule) for the current year. The example below illustrates how to estimate PMT data using the average trip length.

Note that you can view your average trip length for annual total data from the prior years in Internet reporting by clicking on the **Reports** tab.

Exhibit 57 — Using Average Trip Length to Estimate Passenger Miles Traveled Data

Example: Transit agency A serves an urbanized area (UZA) with a population of 350,000 (2010 Census). The transit agency directly operates MB and DR modes with 110 and 34 VOMS, respectively. What are the NTD reporting requirements for PMT data?

Solution: Transit agency A can sample (or conduct 100% counts) every three years since it is in an UZA less than 500,000 in population. Its sampling options are:

- Make a 100% count of PMT and UPT;
- Conduct a 100% count of UPT in the current year, and estimate PMT data using the average trip factors from the mandatory year; or

Use a statistically valid sampling technique to estimate PMT every year.

Transit agency A decides to do a 100% count of PMT and UPT for DR mode and to report MB data using average trip length statistics to estimate intermediate year data. The transit agency performs a 100% count of the UPT for MB in the current year. The following details the mandatory and current year data for MB:

Mandatory Year	Weekday	Saturday	Sunday	Annual Total
PMT	50,000,000	7,000,000	3,000,000	60,000,000
UPT	10,000,000	2,000,000	750,000	12,750,000
Average trip length	5.0	3.5	4.0	4.71

Non-Mandatory Year	Weekday	Saturday	Sunday	Annual Total
UPT	10,500,000	2,100,000	800,000	13,400,000
Average trip length (mandatory year)	5.0	3.5	4.0	4.71
Estimated PM (current year)	52,500,000 (5.0 x 10,500,000)	7,350,000 (3.5 x 2,100,000)	3,200,000 (4.0 x 800,000)	63,114,000 (4.71 x 13,400,000)

Estimated average trip length = PM / UPT

Estimated PM = average trip length × UPT

Service Operated (Days)

You must report the total number of days of service for the following categories:

- Days Operated (days that service was actually operated);
- Days Not Operated Due to Strikes (days that service would normally have operated but was not due to a transit labor strike); and
- Days Not Operated Due to Officially Declared Emergencies (days that service would normally have operated but was not due to an officially declared emergency).

Within each of these categories, you should report the total number of days for weekday schedule, Saturday schedule, and Sunday schedule service. Many transit systems operate different schedules on weekdays, Saturdays, and Sundays. The reported number of days reflects the number of days each schedule was operated. You should report holiday service as the day that most closely reflects the TOS operated. For example, if on Christmas day you operate a Sunday schedule of service, you should report this as a Sunday.

For DT mode, report only the annual total service operated days.

If you did not operate service on some days due to transit labor strikes or officially declared emergencies, Internet reporting will display a box for you to describe the situation.

Directional Route Miles

DRM are a measure of the service provided by your transit agency. They measure, by direction, the path of a vehicle in revenue service. They are counted once for each path, i.e., they do not depend on frequency of service. They are computed

with regard to direction of service, but without regard to the number of traffic lanes or rail tracks existing in the right-of-way (ROW).

Exhibit 58 illustrates reporting of DRM for MB mode for different operations. The graphic illustrates the difference between service operated in one direction only and service operated in both directions.

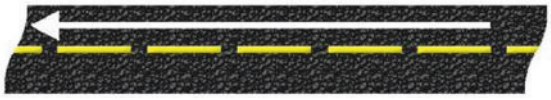
You should report DRM for fixed route services. You do not report data for DR, DT, JT, PB, and VP services.

The discussion in this section covers:

- Guideway classification;
- MB, CB and RB reporting requirements; and
- Reporting requirements for non-bus modes.

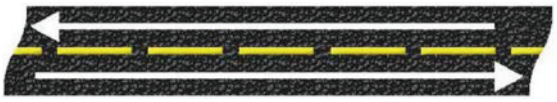
Exhibit 58 — Calculating Directional Route Miles

Example 1 – Two MB routes operate in only one direction over a one-mile segment of Main Street. In this case, there is one DRM.



Solution: Service in 1 direction = 1 DRM

Example 2 – Two MB routes operate in both directions over the one-mile segment of Main Street. In this case, there are two DRM.



Solution: Service in 2 directions = 2 DRM

Guideway Classification

The reporting of DRM varies by fixed route mode. The definition of FG is a separate ROW for the exclusive use of public transportation vehicles. By this definition, all rail modes operate exclusively on FG. For rail modes, you enter the data for DRM in the Fixed Guideway Segments form (S-20). The totals for these data are transferred to the S-10 form.

By Federal statute, the DRM operated in TR and FB service also are considered FG. For these modes, enter the data for DRM in the Fixed Guideway Segments form (S-20). These data are then transferred to the S-10 form.

Four modes (CB, MB, RB, and TB) may operate in both in their own FGs, but also in mixed traffic rights-of-way (ROW) with other vehicles. For these modes, you report and categorize DRM by the type of right-of-way (ROW) in which the mode operates as follows:

- **Fixed Guideway (FG).** Roadways reserved at all times for use by only public transportation vehicles.
- **High Intensity Bus (HIB).** Roadways reserved at some times for transit use, or for HOV or HO/T operations.
- **Mixed traffic ROW.** Conventional streets and roads over which transit vehicles share operating space with cars and trucks. Mixed traffic ROW is the most common ROW used by buses.

Again, for CB, MB, and TB, you may report very detailed information on the S-20 form. For TB, total DRM for all three categories are transferred to the S-10 form. For CB and MB, FG and HIB DRM are transferred, and you will have to report mixed traffic DRM manually.

There are two guideway categories: Statutory Fixed Guideway and Non-Statutory Mixed Traffic. In most cases all DRM operated on Bus Rapid Transit (RB) service are considered Statutory Fixed Guideway. These DRM are transferred from the S-20 form to the S-10 and shown as Fixed Guideway. In some rare cases some DRM of RB service is not considered FG. These DRM are called Non-Statutory Mixed Traffic and must be entered manually as Mixed Traffic ROW.

The transferred values for DRM describe the service operated by the transit agency. Although related, the transferred data are not necessarily a summary of the DRM that are eligible for funding under the UAF Program. The eligibility for the UAF Program is based on the data reported and summarized in the S-20 form. You should go to the discussion of the S-20 form for more details.

Reporting Requirements

There are no reporting requirements for non-bus modes in the S-10 form. The total DRM are transferred automatically from the data entered in the S-20 form. See the discussion of the S-20 form for more details.

You should report DRM for bus service operated in mixed traffic ROW. Total DRM are transferred from the S-20 form for fixed guideway and high intensity bus. See the discussion of the S-20 form for more details.

Line by Line Instructions for Service form (S-10)

You should complete one form for each mode and type of service (TOS).

Form Level Help: You should click on the **Help** tab at the top of the screen for form level help.

Form Note: A form note can be attached to any form. You should use the **Add Form Note** link for relevant information to a specific field, to the entire form or to multiple forms. You should click on the **Add Form Note** link at the top of the screen and enter your note on the **Notes** screen. You can review and/or edit a form note from the **Notes** tab. You should not use the

Form Notes feature to answer issues generated from this form. From the **Issues** tab, you should use the **Add Comments** link next to the specific issue.

Saving or Closing the Form: You should click on the **Save** button at the bottom of the screen to save the form. You should click on the **Close** button at the bottom of the screen to close the form without saving.

Maximum Service Vehicles

Line 01, column a: Vehicles Operated in Annual Maximum Service (VOMS). **Pre-filled** field based on the data reported on the Identification form (B-10).

- The number of vehicles operated on the maximum day of the year to provide peak period service. For commuter rail (CR), this number includes passenger cars and locomotives.

Line 02, column a: Vehicles Available for Annual Maximum Service.

- Enter the number of vehicles available on the maximum day of the year to provide peak period service (i.e., VOMS) plus spares, out of service vehicles, and vehicles in or awaiting maintenance; and excluding vehicles awaiting sale or emergency contingency fleet). For CR, include passenger cars and locomotives.

Periods of Service

Line 03: Time Service Begins

Use 2400-hour time (e.g., 2:00 PM = 1400). Report the normal periods of service for a continuous day of operation. For example, if AM peak service begins at 4:45 AM and the last service of the day ends at 2:00 AM the following day, report the periods of service for an average weekday schedule as 0445 and 0200. If you operate 24-hour service, enter 0000.

- Column a: Average Weekday Schedule. Enter the time service begins for an average weekday schedule.
  - Does not apply to demand response-taxi (DT) or vanpool (VP).
  - This is the time vehicles leave the garage or yard to begin the day's service.
- Column b: Average Saturday Schedule. Enter the time service begins for an average Saturday schedule.
  - Does not apply to demand response-taxi (DT) or vanpool (VP).
- Column c: Average Sunday Schedule. Enter the time service begins for an average Sunday schedule.
  - Does not apply to demand response-taxi (DT) or vanpool (VP).
- Column e: Weekday AM Peak. Enter the time AM Peak service begins for an average weekday schedule.
  - Does not apply to aerial tramway (TR), demand response (DR), demand response-taxi (DT), ferryboat (FB), jitney (JT), publico (PB), and vanpool (VP) modes.
- Column f: Weekday Midday. Enter the time midday service begins for average weekday schedule.
  - Does not apply to TR, DR, DT, FB, JT, PB, and VP modes.
- Column g: Weekday PM Peak. Does not apply to TR, DR, DT, FB, JT, PB, and VP modes.
  - Enter the time PM peak service begins for an average weekday schedule.

Line 04: Time Service Ends

Use 2400-hour time (e.g., 2:00 PM = 1400). Report the normal periods of service for a continuous day of operation. For example, if AM Peak service begins at 4:45 AM and the last service of the day ends at 2:00 AM the following day, report the periods of service for an average weekday as 0445 and 0200. If you operate 24-hour service, enter 2359.

- Column a: Average Weekday Schedule. Enter the time service ends for an average weekday schedule.
  - Does not apply to DT or VP.
  - This is the time vehicles return to the garage or yard to end the day's service.
- Column b: Average Saturday Schedule. Enter the time service ends for an average Saturday.
  - Does not apply to DT or VP
- Column c: Average Sunday Schedule. Enter the time service ends for an average Sunday.
  - Does not apply to DT or VP.

- Column e: Weekday AM Peak. Enter the time AM Peak service ends for an average weekday schedule.
    - Does not apply to TR, DR, DT, FB, JT, PB, and VP modes.
- Column f: Weekday Midday. Enter the time midday service ends for an average weekday schedule.
    - Does not apply to TR, DR, DT, FB, JT, PB, and VP modes.
- Column g: Weekday PM Peak. Enter the time PM peak service ends for an average weekday schedule.
    - Does not apply to TR, DR, DT, FB, JT, PB, and VP modes.

Service Supplied

Line 05: Trains in Operation

Applies to rail modes.

- Column a: Average Weekday Schedule. Enter the number of trains in operation for an average weekday schedule.
- Column b: Average Saturday Schedule. Enter the number of trains in operation for an average Saturday schedule.
- Column c: Average Sunday Schedule. Enter the number of trains in operation for an average Sunday schedule.
- Column e: Weekday AM Peak. Enter the number of trains in operation for AM peak service.
- Column f: Weekday Midday. Enter the number of trains in operation for midday service.
- Column g: Weekday PM Peak. Enter the number of trains in operation for PM peak service.
- Column h: Weekday Other. Enter the number of trains in operation for nighttime service after the PM peak and before the AM peak. This is sometimes referred to as night owl services.

Line 06: Vehicles/Passenger Cars in Operation

Non-rail modes use vehicles. Rail modes use passenger cars.

Does not apply to DT mode.

- Column a: Average Weekday Schedule. Enter the number of vehicles/passenger cars in operation for an average weekday schedule.
- Column b: Average Saturday Schedule. Enter the number of vehicles/passenger cars in operation for an average Saturday schedule.
- Column c: Average Sunday Schedule. Enter the number vehicles/passenger cars in operation for an average Sunday schedule.
- Column e: Weekday AM Peak. Enter the number of vehicles/passenger cars in operation for AM peak service.
    - Does not apply to TR, DR, FB, JT, PB, and VP modes.
- Column f: Weekday Midday. Enter the number of vehicles/passenger cars in operation for midday service.
    - Does not apply to TR, DR, FB, JT, PB, and VP modes.
- Column g: Weekday PM Peak. Enter the number of vehicles/passenger cars in operation for PM peak service.
    - Does not apply to TR, DR, FB, JT, PB, and VP modes.
- Column h: Weekday Other. Enter the number of vehicles/passenger cars in operation for nighttime service after the PM peak and before the AM peak. This is sometimes referred to as night owl services.
    - Does not apply to TR, DR, DT, FB, JT, PB, and VP modes.

Line 07: Total Actual Train Miles

Applies to rail modes.

These are all the revenue and deadhead miles that the trains operated for an average weekday, average Saturday and average Sunday schedule.

- Column a: Average Weekday Schedule. Enter the total actual train miles for an average weekday schedule.
- Column b: Average Saturday Schedule. Enter the total actual train miles for an average Saturday schedule.

- Column c: Average Sunday Schedule. Enter the total actual train miles for an average Sunday schedule.
- Column d: Annual Total. Enter the annual total of train miles. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.

Line 08: Total Actual Train Hours

Applies to rail modes.

These are all the revenue and deadhead hours that the trains operated for an average weekday, average Saturday and average Sunday schedule.

- Column a: Average Weekday Schedule. Enter the total actual train hours for an average weekday schedule.
- Column b: Average Saturday Schedule. Enter the total actual train hours for an average Saturday schedule.
- Column c: Average Sunday Schedule. Enter the total actual train hours for an average Sunday schedule.
- Column d: Annual Total. Enter the annual total of train hours. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.

Line 09: Total Actual Train Revenue Miles

Applies to rail modes.

These are all the miles that the trains operated in revenue service for an average weekday, average Saturday and average Sunday schedule.

- Column a: Average Weekday Schedule. Enter the total actual train revenue miles for an average weekday schedule.
- Column b: Average Saturday Schedule. Enter the total actual train revenue miles for an average Saturday schedule.
- Column c: Average Sunday Schedule. Enter the total actual train revenue miles for an average Sunday schedule. Column d: Annual Total. Enter the annual total of train revenue miles. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.

Line 09a – Train Deadhead Miles

- Columns a – d: These are **non-editable auto-calc** fields.

Line 10: Total Actual Train Revenue Hours

Applies to rail modes.

These are all the hours that the trains operated in revenue service for an average weekday, average Saturday and average Sunday schedule.

- Column a: Average Weekday Schedule. Enter the total actual train revenue hours for an average weekday schedule.
- Column b: Average Saturday Schedule. Enter the total actual train revenue hours for an average Saturday schedule.
- Column c: Average Sunday Schedule. Enter the total actual train revenue hours for an average Sunday schedule.
- Column d: Annual Total. Enter the annual total of train revenue hours. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.

Line 11: Total Actual Vehicle/Passenger Car Miles

Non-rail modes use vehicles. Rail modes use passenger cars.

These are all the revenue and deadhead miles that the vehicle/passenger cars operated for an average weekday, average Saturday and average Sunday schedule. Does not apply to DT mode.

- Column a: Average Weekday Schedule. Enter the total actual vehicle/passenger car miles for an average weekday schedule.

- Column b: Average Saturday Schedule. Rail modes use passenger cars. Enter the total actual vehicle/passenger car miles for an average Saturday schedule.
- Column c: Average Sunday Schedule. Rail modes use passenger cars. Enter the total actual vehicle/passenger car miles for an average Sunday schedule.
- Column d: Annual Total. Enter the annual total of vehicle/passenger car miles. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.
- DR, DT, VP, JT and PB as non-scheduled services do not have extra service.

Line 11a: Train Deadhead Hours

- Columns a – d: These are **non-editable auto-calc** fields.

Line 12: Total Actual Vehicle/Passenger Car Revenue Miles

Non-rail modes use vehicles. Rail modes use passenger cars.

These are all the miles that the vehicle/passenger cars operated in revenue service for an average weekday, average Saturday and average Sunday schedule.

- Column a: Average Weekday Schedule. Enter the total actual vehicle/passenger car revenue miles for an average weekday schedule.
    - Does not apply to DT mode.
- Column b: Average Saturday Schedule. Enter the total actual vehicle/passenger car revenue miles for an average Saturday schedule.
    - Does not apply to DT mode.
- Column c: Average Sunday Schedule. Enter the total actual vehicle/passenger car revenue miles for an average Sunday schedule.
    - Does not apply to DT mode.
- Column d: Annual Total. Enter the annual total of vehicle/passenger car revenue miles. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.
    - DR, DT, VP, JT, and PB as non-scheduled services do not have extra service.
- Column e: Average Weekday AM Peak. Enter the number of Passenger Car Revenue Miles for average weekday AM peak service.
    - Applies to heavy rail (HR), light rail (LR), streetcar rail (SR), hybrid rail (YR), and commuter rail (CR) only.
- Column f: Average Weekday Midday. Enter the number of Passenger Car Revenue Miles for average weekday midday service.
    - Applies to HR, LR, SR, YR, and CR only.
- Column g: Average Weekday PM Peak. Enter the number of Passenger Car Revenue Miles for average weekday PM peak service.
    - Applies to HR, LR, SR, YR, and CR only.
- Column h: Average Weekday Other. Enter the number of Passenger Car Revenue Miles for average weekday nighttime service after the PM peak and before the AM peak. This is sometimes referred to as night owl services.
    - Applies to HR, LR, SR, YR, and CR only.

Line 12a: Deadhead Miles/Passenger Car Deadhead Miles

Does not apply to DT mode.

- Columns a – d: These are **non-editable auto-calc** fields.

Line 13: Total Scheduled Vehicle/Passenger Car Revenue Miles

Non-rail modes use vehicles. Rail modes use passenger cars.

These are all the miles that the vehicle/passenger cars were scheduled to operate in revenue service for an average weekday, average Saturday and average Sunday schedule.

- Column a: Average Weekday Schedule. Enter the total scheduled vehicle/passenger car revenue miles for an average weekday schedule.
    - Does not apply to DR, DT, JT, PB, and VP modes.
- Column b: Average Saturday Schedule. Does not apply to DR, JT, PB, and VP modes. Enter the total scheduled vehicle/passenger car revenue miles for an average Saturday schedule.
    - Does not apply to DR, DT, JT, PB, and VP modes.
- Column c: Average Sunday Schedule. Enter the total scheduled vehicle/passenger car revenue miles for an average Sunday schedule.
    - Does not apply to DR, DT, JT, PB, and VP modes.
- Column d: Annual Total. Enter the annual total of scheduled vehicle/passenger car revenue miles. Equal to the sum of average weekday schedule, Saturday and Sunday scheduled service multiplied by the respective days operated on line 21.
    - In the cell to the right, there is an auto calculation of annualized average daily data computed as the average weekday schedule, average Saturday schedule and average Sunday schedule data multiplied by the number of days operated for (line 21) weekdays (column a), Saturdays (column b) and Sundays (column c). This is the annual total to enter in column d.
    - Does not apply to DR, DT, JT, PB, and VP modes.

Line 14: Total Actual Vehicle/Passenger Car Hours

Does not apply to DT mode.

Non-rail modes use vehicles. Rail modes use passenger cars.

These are all the revenue and deadhead hours that the trains operated for an average weekday, average Saturday and average Sunday schedule.

- Column a: Average Weekday Schedule. Enter total actual vehicle/passenger car hours for an average weekday schedule.
- Column b: Average Saturday Schedule. Enter total actual vehicle/passenger car hours for an average Saturday schedule.
- Column c: Average Sunday Schedule. Enter total actual vehicle/passenger car hours for an average Sunday schedule.
- Column d: Annual Total. Enter the annual total of vehicle/passenger car hours. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.
- DR, VP, JT, and PB as non-scheduled services do not have extra service.

Line 15: Total Actual Vehicle/Passenger Car Revenue Hours

Non-rail modes use vehicles.

These are all the hours that vehicle/passenger cars operated in revenue service for an average weekday, average Saturday and average Sunday schedule.

- Column a: Average Weekday Schedule. Enter the total actual vehicle/passenger car revenue hours for an average weekday schedule.
    - Does not apply to DT mode.
- Column b: Average Saturday Schedule. Enter the total actual vehicle/passenger car revenue hours for an average Saturday schedule.
    - Does not apply to DT mode.
- Column c: Average Sunday Schedule. Enter the total actual vehicle/passenger car revenue hours for an average Sunday schedule.
    - Does not apply to DT mode.

- Column d: Annual Total. Rail modes use passenger cars. Enter the annual total of actual vehicle/passenger car revenue hours. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.
    - DR, DT, VP, JT, and PB as non-scheduled services do not have extra service.

Line 15a: Deadhead Hours/Passenger Car Deadhead Hours

Does not apply to DT mode.

- Columns a – d: These are **non-editable auto-calc** fields.

Line 16, column d: Charter Service Hours Annual Total. Enter annual charter service hours only if the vehicle is used exclusively for service not available to the general public.

- Applies only to non-rail modes.
- Do not enter charter service hours as vehicle hours or vehicle revenue hours (VRH).

Line 17, column d: School Bus Hours Annual Total. Enter annual school bus hours only if the vehicle is used exclusively to carry school passengers to and from their schools.

Applies only to non-rail modes.

- Do not include school tripper service. Do not enter school bus hours as vehicle hours or vehicle revenue hours (VRH) above.

Service Consumed

Line 18: Unlinked Passenger Trips (UPT)

Count passengers each time they board a vehicle.

This is not the same as tickets/tokens sold as each unlinked passenger trip (UPT) is counted even if there was a transfer fare paid.

- Column a: Average Weekday Schedule. Enter the total passenger boardings for an average weekday schedule.
    - Does not apply to DT mode.
- Column b: Average Saturday Schedule. Enter the total passenger boardings for an average Saturday schedule.
    - Does not apply to DT mode.
- Column c: Average Sunday Schedule. Enter the total passenger boardings for an average Sunday schedule.
    - Does not apply to DT mode.
- Column d: Annual Total. Enter the annual total of all UPT. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.
    - DR, DT, VP, JT, and PB as non-scheduled services do not have extra service.
- Column e: Weekday AM Peak. Enter the total UPT attributable to service on an average weekday schedule AM Peak.
    - Applies to HR, LR, SR, YR, and CR only.
- Column f: Weekday Midday. Enter the total UPT attributable to service on an average weekday schedule Midday.
    - Applies to HR, LR, SR, YR, and CR only.
- Column g: Weekday PM Peak. Enter the total UPT attributable to service on an average weekday schedule PM Peak.
    - Applies to HR, LR, SR, YR, and CR only.
- Column h: Weekday Other. Enter the total UPT attributable to service for nighttime service after the PM Peak service and before the AM Peak service. This is sometimes referred to as night and owl services.
    - Applies to HR, LR, SR, YR, and CR only.

Line 19, column d: Annual Total: Americans with Disabilities Act of 1990 (ADA) UPT Annual Total. Enter the number of UPT for complementary paratransit trips under the Americans with Disabilities Act of 1990 (ADA) requirements.

- Applies to DR and DT modes only.

Line 19a, column d: Annual Total: Sponsored Service Unlinked Passenger Trips (UPT) Annual Total. Enter the number of UPT for sponsored trips. These trips are paid in whole or part by a third party who, in many cases, handled all or part of the trip arrangements.

- Applies to DR and DT modes only.

Line 20: Passenger Miles Traveled (PMT)

Derive passenger miles traveled from sampling, 100 percent counts or estimate for intermediate years (non-mandatory sampling year).

- Column a: Average Weekday Schedule. Enter the total passenger miles traveled (PMT) attributable to service on an average weekday schedule.
    - Does not apply to DT mode.
- Column b: Average Saturday Schedule. Enter the total PMT attributable to service on an average Saturday.
    - Does not apply to DT mode.
- Column c: Average Sunday Schedule. Enter the total PMT attributable to service on an Average Sunday.
    - Does not apply to DT mode.
- Column d: Annual Total. Enter the annual total number of PMT. Include service operated for one-time or limited events such as day of the game football shuttles, extra holiday shopper service, or a visit to the city by the President of the United States.
    - DR, DT, VP, JT and PB as non-scheduled services do not have extra service.

Service Operated (Days)

Line 21: Days Operated

- Column a: Weekday Schedule. Enter the annual number of weekdays that service was operated for your transit agency (only service included in your report).
    - Does not apply to DT mode.
- Column b: Saturday Schedule. Enter the annual number of Saturdays that service operated for your transit agency (only service included in your report).
    - Does not apply to DT mode.
- Column c: Sunday Schedule. Enter the annual number of Sundays that service was operated for your transit agency (only service included in your report).
    - Does not apply to DT mode.
- Column d: Annual Total. This is an **auto-calculated** field and cannot be edited, review for accuracy. Equal to the sum of days operated on weekday, Saturday, and Sunday schedules.
    - For DT mode, enter the days operated. Throughout the year.

Line 22: Days Not Operated Due to Strikes

- Column a: Weekday Schedule. Enter the annual number of weekdays that service was not operated due to strikes.
- Column b: Saturday Schedule. Enter the annual number of Saturdays that service was not operated due to strikes.
- Column c: Sunday Schedule. Enter the annual number of Sundays that service was not operated due to strikes.
- Column d: Annual Total. This is an **auto-calculated** field and cannot be edited, review for accuracy. Equal to the sum of days not operated due to strikes on weekday, Saturday, and Sunday schedules.
    - Describe the Days Not Operated Due to Strikes in the – Other description field.
    - For DT mode, enter the days not operated due to strikes throughout the year.

Line 23: Days Not Operated Due to Officially Declared Emergencies

A person in authority (usually the mayor, county head or governor) must officially declare an emergency.

- Column a: Weekday Schedule. Enter the annual number of weekdays that service was not operated due to officially declared emergencies.
    - Does not apply to DT mode.
- Column b: Saturday Schedule. Enter the annual number of Saturdays that service was not operated due to officially declared emergencies.
    - Does not apply to DT mode.
- Column c: Sunday Schedule. Enter the annual number of Sundays that service was not operated due to officially declared emergencies.
    - Does not apply to DT mode.
- Column d: Annual Total. This is an **auto-calculated** field and cannot be edited, review for accuracy. Use the Add Form Note link at the top of the form to enter your note on the notes screen. Equal to the sum of not operated due to officially declared emergencies on weekday, Saturday, and Sunday schedules.
    - Describe the Days Not Operated Due to Officially Declared Emergencies in the – Other description field.
    - For DT mode, enter the days not operated due to strikes throughout the year.

Directional Route Miles

Line 24, column a: Fixed Guideway. This is a **non-editable** field: The number of route miles, to the nearest 10th of a mile, on roadway or other transit right-of-way (ROW) reserved for transit at all times of the day, over which transit vehicles travel in each direction while in revenue service. Directional route miles (DRM) are measured on the last day of the fiscal year.

- Applicable only to MB, CB, and RB, modes
- Data transfer automatically from the S-20 form.

Line 25, column a: High Intensity Bus. This is a **non-editable** field: The number of route miles, to the nearest 10th of a mile, on roadway or other transit right-of-way reserved for a portion of the day, over which transit vehicles and/or HOV and HO/T travel in each direction while in revenue service. DRM are measured on the last day of the fiscal year.

- Applicable only to CB and MB modes
- Data transfer automatically from the S-20 form.

Line 26, column a: Mixed Traffic ROW. Enter the number of route miles to the nearest 10th of a mile, on roadway not reserved during any part of a day (transit vehicles travel with other vehicular traffic in same ROW), over which transit vehicles travel in each direction while in revenue service. DRM are measured on the last day of the fiscal year.

- Applicable only to CB, MB, and RB modes.
- Data transfer automatically from the S-20 form for TB mode.
- For CB, MB and RB mode, enter the mixed traffic ROW DRM.

Line 27, column a: Total. This is a **non-editable - auto-calculated** field. The total DRM for rail, FB and TR modes. Note that these modes are considered exclusive right-of-way (ROW). The total DRM over fixed guideway, high intensity bus, and mixed traffic right-of-way for CB, MB, RB and TB modes.