

## PtMS for Windows: Scheduling with Deviated Fixed Routes

Revised 05/10/2009

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### Deviated Fixed Route Definition

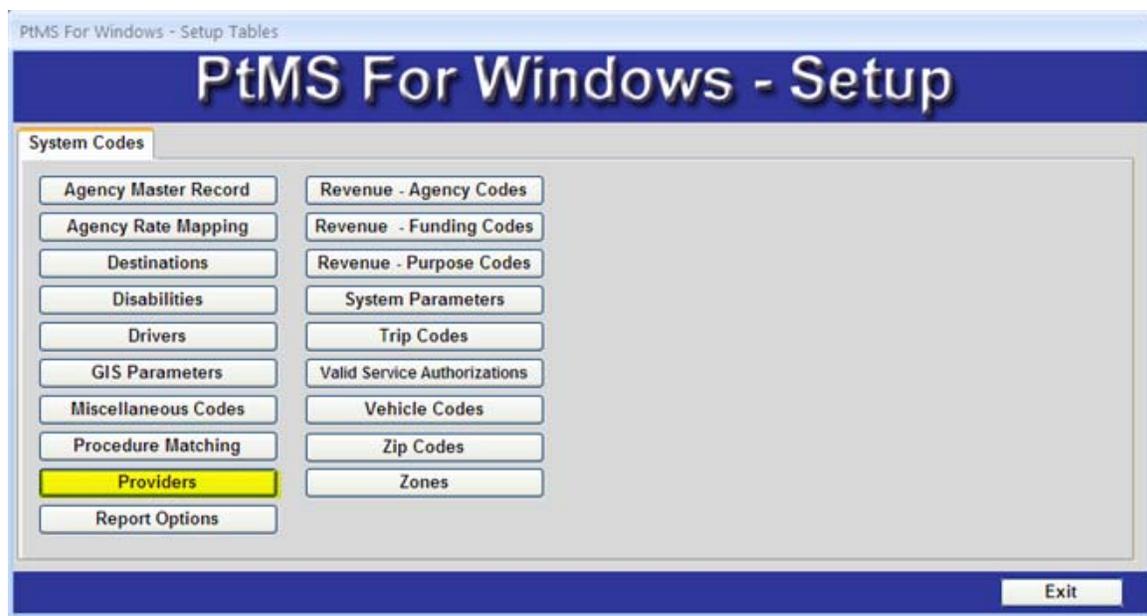
A **deviated-fixed route service** operates a bus or van along a fixed route and/or a set of prescribed stops and keeps to a timetable, but the bus or van can deviate from the route to go to a specific pickup or drop-off location, such as a house, a facility such as a child care center or employment site, or a doctor's office.. Once the pickup or drop-off is made, the vehicle goes back to the place along the route and resumes the route.

### Can PtMS be used to schedule and add trips to Deviated Fixed Route services?

Yes. First the fixed route must be setup in PtMS as a set of standing order trips that define the route. Next, demand trip requests can be easily added into the fixed route schedule as scheduled deviations to the route using the PtMS Interactive Scheduler.

### Setting Up a Deviated Fixed Route in PtMS

#### Create a Provider Code for Fixed Route Vehicles



In the PtMS Setup menu select Providers and add the provider code you will use to group all the Fixed Route vehicles codes under – for this example we have set up the provider code “FXD” for “Deviated Fixed Routes”.

The screenshot shows a software window titled "PtMS For Windows - Providers Add/Edit". The main heading is "PROVIDERS ADD/EDIT". The form contains the following fields and options:

- Provider Code:   Medicaid  Web Trip Verification
- Description:
- Last Name:  First Name:
- Title:
- Address 1:
- Address 2:
- City:  State:  Zipcode:
- Telephone 1:  X:  2:  X:
- NPI:

### Add Fixed Routes as Vehicles to the PtMS Vehicle Table

The screenshot shows a software window titled "PtMS For Windows - Setup". The main heading is "PtMS For Windows - Setup". The "System Codes" section is active, displaying a grid of buttons for various setup options:

|                      |                              |
|----------------------|------------------------------|
| Agency Master Record | Revenue - Agency Codes       |
| Agency Rate Mapping  | Revenue - Funding Codes      |
| Destinations         | Revenue - Purpose Codes      |
| Disabilities         | System Parameters            |
| Drivers              | Trip Codes                   |
| GIS Parameters       | Valid Service Authorizations |
| Miscellaneous Codes  | <b>Vehicle Codes</b>         |
| Procedure Matching   | Zip Codes                    |
| Providers            | Zones                        |
| Report Options       |                              |

An "Exit" button is located at the bottom right of the window.

Add each fixed route as a vehicle to the Vehicle Table.

PtMS For Windows - Vehicle Codes

### VEHICLE CODES - ADD/EDIT

Vehicle Code: F1A Description: Deviated Fixed Route 1 - Run A Provider: FXD Deviated Fixed Routes

General Vehicle Information | Shift Segments

VIN:

Skip Posting For Trip Verification: N

Tour Number:

Equiped For Wheelchair Clients: Y

Wheelchair Capacity: 2

Ambulatory Capacity: 15

Total Capacity: 17

Shift Start Time: 09:00

Shift End Time: 11:30

Garage Location:

Email:

Fax:

| Segment # | Start Time | End Time |
|-----------|------------|----------|
| 1         |            |          |
| 2         |            |          |
| 3         |            |          |
| 4         |            |          |
| 5         |            |          |
| 6         |            |          |
| 7         |            |          |
| 8         |            |          |
| 9         |            |          |

In Service Days

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

Out of Service (Y/N), or Remove from Vehicle Assignment (R): N

Start Location:

Vehicle To Edit: F1A

Add New Vehicle Delete Vehicle Calculate Day/Times Close

## Add Each Route Stop to the PtMS Destination Table

PtMS For Windows - Setup Tables

# PtMS For Windows - Setup

System Codes

|                      |                              |
|----------------------|------------------------------|
| Agency Master Record | Revenue - Agency Codes       |
| Agency Rate Mapping  | Revenue - Funding Codes      |
| <b>Destinations</b>  | Revenue - Purpose Codes      |
| Disabilities         | System Parameters            |
| Drivers              | Trip Codes                   |
| GIS Parameters       | Valid Service Authorizations |
| Miscellaneous Codes  | Vehicle Codes                |
| Procedure Matching   | Zip Codes                    |
| Providers            | Zones                        |
| Report Options       |                              |

Exit

Each route stop must be entered into the destination table and geocoded. Here is the list of stops for this fixed route example:

1. Granite Run Mall
2. Riddle Memorial Hospital
3. Media Post Office

4. Springfield Mall Shopping Center
5. Springfield Hospital
6. Healthplex Sports Club
7. Lawrence Park Shopping Center
8. Newtown Square Shopping Center
9. Delaware County Community College
10. Granite Run Mall

PtMS For Windows - Destinations & Facilities

**DESTINATIONS & FACILITIES**

Facility Name: Granite Run Mall      Zone Code: 493477      Zone Name: DELAWARE COUNTY

Facility Address: 1067 West Baltimore Pike

Zip Code: 19063      State: PA      City: MEDIA

Telephone: \_\_\_\_\_

Drv Instructions: \_\_\_\_\_

Provider Number: \_\_\_\_\_      NPI: \_\_\_\_\_

Provider Fax #: \_\_\_\_\_      Provider License: \_\_\_\_\_      Provider Type: \_\_\_\_\_

Notes: \_\_\_\_\_

Gis X: 1205220354      Gis Y: 1034746756      Gis Lat: 39.9156665207802      Gis Lon: -75.4313074668586

Default Purpose: \_\_\_\_\_      Active: Y      Procedure Modifier: \_\_\_\_\_      Place of Service: \_\_\_\_\_

Service Mode: \_\_\_\_\_      Alias: \_\_\_\_\_      Record ID: 11

Find Destination    New Destination    Delete Destination    Geocode    [Home] [Back] [Forward] [Print]    Close

Each destination must be geocoded using the PtMS mapping software.

PtMS For Windows - Geocode Function

**PtMS - Geocode**

Address: 1067 West Baltimore Pike

City: MEDIA

State: PA      Zipcode: 19063      Secs: \_\_\_\_\_

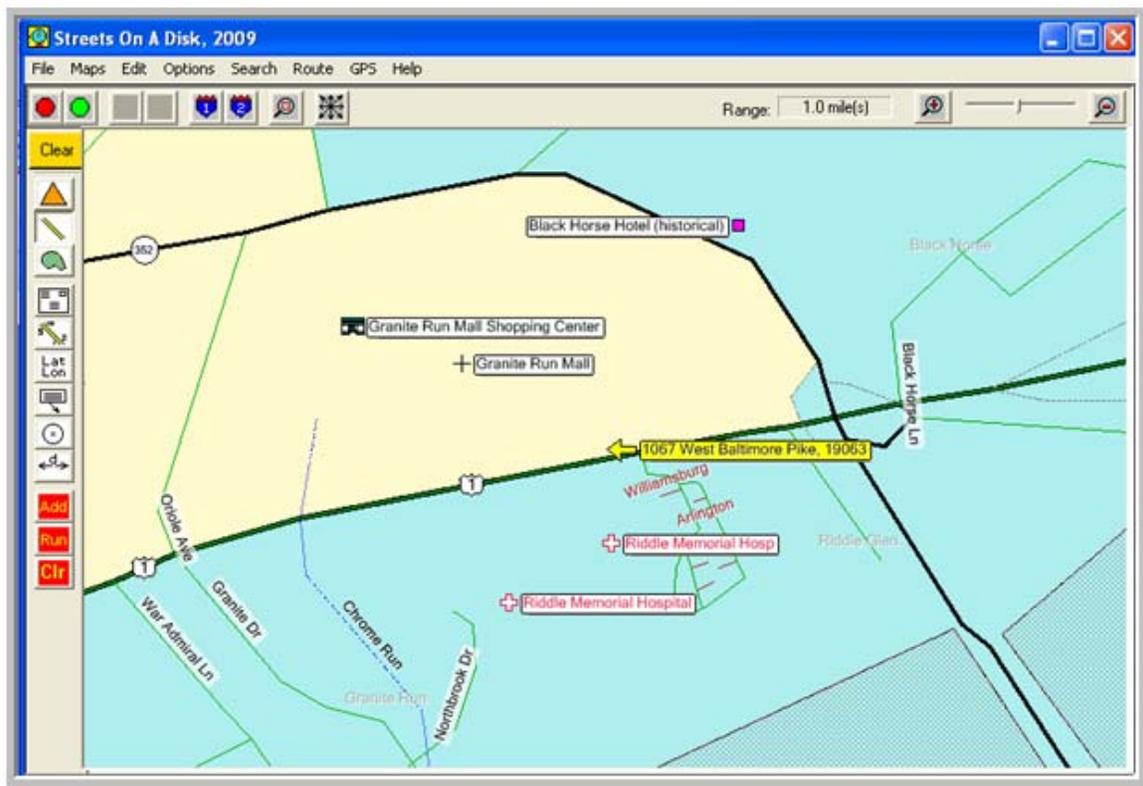
| Primary Result        | Secondary Result |
|-----------------------|------------------|
| Gis X: 1205250730     | Gis X: _____     |
| Gis Y: 1034736614     | Gis Y: _____     |
| Lat: 39.9144716519357 | Lat: _____       |
| Lon: -75.428704788303 | Lon: _____       |
| Zone: 493479          | Zone: _____      |

Use Primary Result

**Geocode Results**

```
>@address_xy
--> 1067 W Baltimore Pike, 19063
--> 1205250730 1034736614
--> 39.9144716519357 -75.428704788303
>Ok
>@bring_map_to_top
>Ok
```

Geocode Address    Update    Try Results Load    Get Manual X,Y    Close



Once all the stop locations are entered into the destination table the route can be setup.

PtMS for Windows - Destination Lookup

| Destination Lookup                |   |    |
|-----------------------------------|---|----|
| Destination ^                     | Address                                     | ID |
| CROZER CHESTER MED CENTER         | 2600 W 9TH ST. , CHESTER,PA                 | 3  |
| Delaware County Community College | 617 State Rte 252. , MEDIA,PA               | 15 |
| Delware County Courthouse         | 201 W Front St. , MEDIA,PA                  | 10 |
| Granite Run Mall                  | 1067 West Baltimore Pike. , MEDIA,PA        | 11 |
| Healthplex Sports Club            | 194 West Sproul Rd. , Springfield,PA        | 6  |
| Lawrence Park Shopping Center     | Lawrence Rd & Sproul Rd. , BROOMALL,PA      | 12 |
| Media Post Office                 | 101 E Baltimore Ave. , MEDIA,PA             | 14 |
| MEDICAL ASSOCIATES                | 350 S CHESTER RD. , SWARTHMORE,PA           | 5  |
| Newtown Square Shopping Center    | 3590 West Chester Pike. , NEWTOWN SQUARE,PA | 13 |
| PHYSICAL THERAPY CENTER           | 2400 SPROUL RD. , BROOMALL,PA               | 4  |
| RIDDLE MEMORIAL HOSPITAL          | 1068 W BALTIMORE PIKE. , MEDIA,PA           | 1  |
| SPRINGFIELD HOSPITAL              | 190 SPROUL RD. , SPRINGFIELD,PA             | 2  |
| Springfield Mall                  | 1250 Baltimore Pike. , Springfield,PA       | 9  |
| Surgical Orthopedic Associates    | 2004 Sproul Rd # 100. , BROOMALL,PA         | 16 |



Once all the stops are entered, the route is setup and ready to be used for scheduling additional demand trips as “deviations” to the fixed route.

PTMS For Windows - Vehicle Manifest Summary

**VEHICLE MANIFEST SUMMARY**

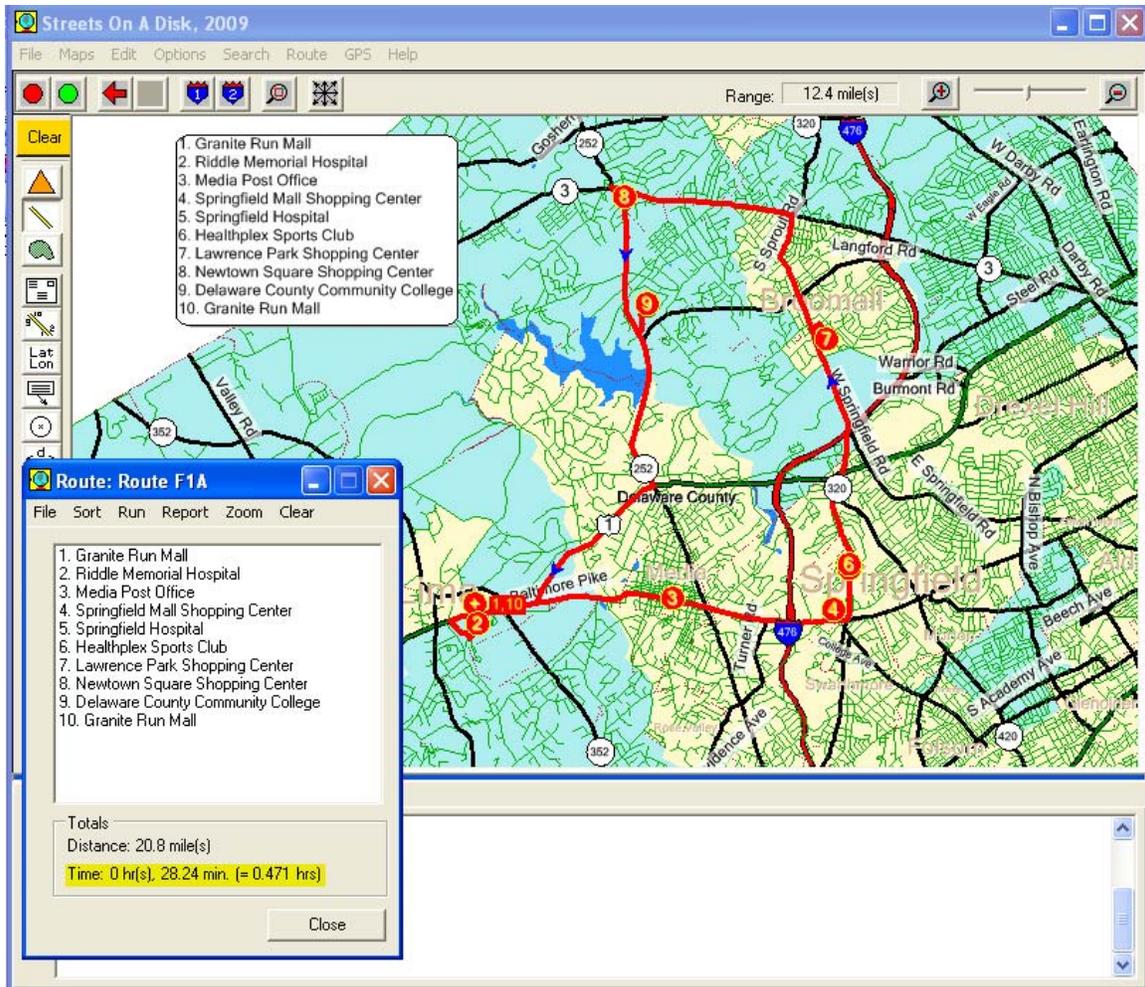
Date: 5/11/2009 Mon  Filter Vehicle: F1A Filter Ride Type: All Sort Trips By: Pickup, Drop Times Pick Providers

| Cx NS | Vehicle | Driver | Sched Times |       | Last Name | First Name | D/R | T/R | Status | Pickup Location                  | Destination                      | Miles | WC  | Agn |
|-------|---------|--------|-------------|-------|-----------|------------|-----|-----|--------|----------------------------------|----------------------------------|-------|-----|-----|
|       |         |        | Pickup      | Drop  |           |            |     |     |        |                                  |                                  |       |     |     |
|       | F1A     |        | 09:00       | 09:10 | Route     | Fixed      | R   | T   |        | Granite Run Mall                 | RIDDLE MEMORIAL HOSPITAL         | 1     | AMB | GEN |
|       | F1A     |        | 09:15       | 09:25 | Route     | Fixed      | R   | T   |        | Media Post Office                | Springfield Mall                 | 2     | AMB | GEN |
|       | F1A     |        | 09:30       | 09:35 | Route     | Fixed      | R   | T   |        | Springfield Mall                 | SPRINGFIELD HOSPITAL             | 1     | AMB | GEN |
|       | F1A     |        | 09:40       | 09:45 | Route     | Fixed      | R   | T   |        | Springfield Mall                 | SPRINGFIELD HOSPITAL             | 1     | AMB | GEN |
|       | F1A     |        | 09:50       | 09:55 | Route     | Fixed      | R   | T   |        | SPRINGFIELD HOSPITAL             | Healthplex Sports Club           | 1     | AMB | GEN |
|       | F1A     |        | 10:00       | 10:10 | Route     | Fixed      | R   | T   |        | Healthplex Sports Club           | Lawrence Park Shopping Center    | 3     | AMB | GEN |
|       | F1A     |        | 10:15       | 10:25 | Route     | Fixed      | R   | T   |        | Lawrence Park Shopping Center    | Newtown Square Shopping Center   | 3     | AMB | GEN |
|       | F1A     |        | 10:30       | 10:35 | Route     | Fixed      | R   | T   |        | Newtown Square Shopping Center   | Delaware County Community Center | 1     | AMB | GEN |
|       | F1A     |        | 10:40       | 10:55 | Route     | Fixed      | R   | T   |        | Delaware County Community Center | Granite Run Mall                 | 4     | AMB | GEN |

Close Map All Trips 999 999 999 999 F1A  Use Status Desc Refresh Screen

## Designing the Route to Allow for Deviations

The route map below shows that the travel time to complete this route without stops is approximately 30 minutes. Adding stop times of 5 minutes (which is generous and most likely not needed to board and discharge passengers) per stop and the completed route would take about 70 minutes. The route has been scheduled to run from 9:00 AM to 11:00 AM. This means there is plenty of slack in the schedule for adding new trips as deviations to the fixed route.



Starting Clock: 09:00 AM  
 Visit Time: 0 hr(s), 5.00 min. (= 0.083 hrs)

Start: 1. Granite Run Mall

Go southwest, 0.3 mile(s), on US Hwy 1.  
 Turn left, go southeast, 0.3 mile(s), on Granite Dr.  
 Turn left, go northeast, 0.2 mile(s), on Northbrook Dr.

Stop: 2. Riddle Memorial Hospital

Clock (arrival): 09:01 AM  
 Time (from start): 0 hr(s), 1.28 min. (= 0.021 hrs)  
 Distance(from start): 0.8 mile(s)  
 Clock (depart): 09:06 AM

Go south, 0.2 mile(s), on Northbrook Dr.  
 Turn right, go northwest, 0.3 mile(s), on Granite Dr.  
 Turn right, go northeast, 0.8 mile(s), on US Hwy 1.  
 Slight turn left, go northeast, 1.8 mile(s), on Baltimore Pike.  
 Turn left, go north, 105 ft, on Monroe St.

Stop: 3. Media Post Office

Clock (arrival): 09:11 AM  
 Time (from last stop): 0 hr(s), 4.26 min. (= 0.071 hrs)  
 Time (from start): 0 hr(s), 10.53 min. (= 0.176 hrs)

Distance(from last stop): 3.1 mile(s)  
Distance(from start): 3.9 mile(s)  
Clock (depart): 09:16 AM

-----  
Go south, 105 ft, on Monroe St.  
Turn left, go east, 1.5 mile(s), on Baltimore Ave.  
Continue, go east, 0.4 mile(s), on Baltimore Pike.  
-----

Stop: 4. Springfield Mall Shopping Center

Clock (arrival): 09:18 AM  
Time (from last stop): 0 hr(s), 2.58 min. (= 0.043 hrs)  
Time (from start): 0 hr(s), 18.11 min. (= 0.302 hrs)  
Distance(from last stop): 1.9 mile(s)  
Distance(from start): 5.8 mile(s)  
Clock (depart): 09:23 AM

-----  
Go east, 0.2 mile(s), on Baltimore Pike.  
Turn left, go north, 0.6 mile(s), on State Rte 320.  
-----

Stop: 5. Springfield Hospital

Clock (arrival): 09:24 AM  
Time (from last stop): 0 hr(s), 1.00 min. (= 0.017 hrs)  
Time (from start): 0 hr(s), 24.12 min. (= 0.402 hrs)  
Distance(from last stop): 0.8 mile(s)  
Distance(from start): 6.6 mile(s)  
Clock (depart): 09:29 AM

-----  
Go north, 162 ft, on State Rte 320.  
Turn left, go west, 199 ft, on Thompson Ave.  
-----

Stop: 6. Healthplex Sports Club

Clock (arrival): 09:29 AM  
Time (from last stop): 0 hr(s), 0.12 min. (= 0.002 hrs)  
Time (from start): 0 hr(s), 29.23 min. (= 0.487 hrs)  
Distance(from last stop): 361 ft  
Distance(from start): 6.7 mile(s)  
Clock (depart): 09:34 AM

-----  
Go east, 199 ft, on Thompson Ave.  
Turn left, go north, 2.9 mile(s), on State Rte 320.  
Turn right, go northeast, 518 ft, on Lawrence Rd.  
Turn right, go southeast, 0.2 mile(s), on \_local (134873380).  
-----

Stop: 7. Lawrence Park Shopping Center

Clock (arrival): 09:39 AM  
Time (from last stop): 0 hr(s), 4.43 min. (= 0.074 hrs)  
Time (from start): 0 hr(s), 38.66 min. (= 0.644 hrs)  
Distance(from last stop): 3.2 mile(s)  
Distance(from start): 9.8 mile(s)  
Clock (depart): 09:44 AM

-----  
Go northwest, 0.2 mile(s), on \_local (134873380).  
Turn left, go southwest, 518 ft, on Lawrence Rd.  
Turn right, go northwest, 0.9 mile(s), on State Rte 320.  
Slight turn right, go north, 0.5 mile(s), on Sproul Rd.  
Turn left, go west, 2.1 mile(s), on State Rte 3.  
Hard turn left, go southeast, 0.2 mile(s), on State Rte 252.  
Turn left, go northeast, 270 ft, on Alpha Dr.  
-----

Stop: 8. Newtown Square Shopping Center

Clock (arrival): 09:49 AM  
Time (from last stop): 0 hr(s), 5.65 min. (= 0.094 hrs)  
Time (from start): 0 hr(s), 49.31 min. (= 0.822 hrs)

Distance(from last stop): 4.1 mile(s)  
Distance(from start): 13.9 mile(s)  
Clock (depart): 09:54 AM

-----  
Go southwest, 270 ft, on Alpha Dr.  
Turn left, go southeast, 1.6 mile(s), on State Rte 252.  
Turn left, go northeast, 0.3 mile(s), on Timber Lake Dr.  
-----

Stop: 9. Delaware County Community College

Clock (arrival): 09:57 AM  
Time (from last stop): 0 hr(s), 2.82 min. (= 0.047 hrs)  
Time (from start): 0 hr(s), 57.13 min. (= 0.952 hrs)  
Distance(from last stop): 1.9 mile(s)  
Distance(from start): 15.9 mile(s)  
Clock (depart): 10:02 AM

-----  
Go west, 0.3 mile(s), on Timber Lake Dr.  
Turn left, go southeast, 1.9 mile(s), on State Rte 252.  
Turn right, go southwest, 2.0 mile(s), on US Hwy 1.  
Slight turn right, go southwest, 0.7 mile(s), on Baltimore Pike.  
-----

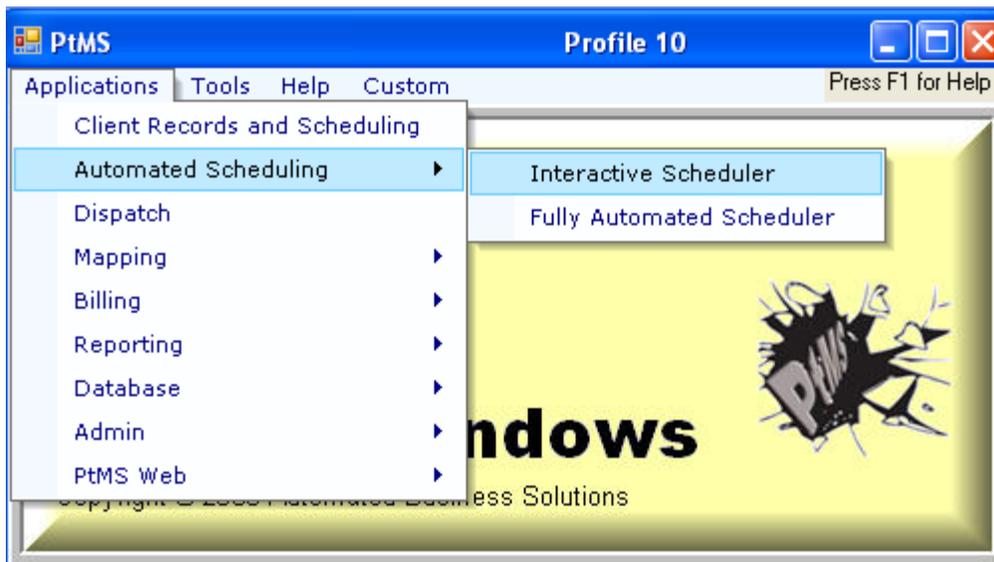
Stop: 10. Granite Run Mall

Clock (arrival): 10:08 AM  
Time (from last stop): 0 hr(s), 6.11 min. (= 0.102 hrs)  
Time (from start): 1 hr(s), 8.24 min. (= 1.137 hrs)  
Distance(from last stop): 4.9 mile(s)  
Distance(from start): 20.8 mile(s)

-----  
Clock (final): 10:08 AM  
Total Distance: 20.8 mile(s)  
Total Drive Time: 0 hr(s), 28.24 min. (= 0.471 hrs)  
Total Visit Time: 0 hr(s), 40.00 min. (= 0.667 hrs)  
Total Time: 1 hr(s), 8.24 min. (= 1.137 hrs)  
-----

## Adding Scheduled Deviations to a Fixed Route

Once demand trip requests are entered into PtMS, they can be efficiently added to existing trip schedules using the PtMS Interactive Scheduler.



**PIMIS - Interactive Scheduler - Trips on 05/11/2009**

File Edit View Tools Reports Help

Current User: Demo\_User

**Trips to be Scheduled**

| Vehicle | Status | Amb/AWC | Name              | T/R | D/R | Dist | PAddress             | PCity          | PickUp | DAddress                       | DC |
|---------|--------|---------|-------------------|-----|-----|------|----------------------|----------------|--------|--------------------------------|----|
| EAS     |        | AMB     | JEFFERSON, THOMAS | T   | D   | 2.0  | 86 E 5TH ST          | MEDIA          | 0930   | SPRINGFIELD HOSPITAL           | SP |
| EAS     |        | AMB     | POLK, JAMES       | T   | D   | 2.8  | 212 Bishop Hollow Rd | NEWTOWN SQUARE | 1000   | Surgical Orthopedic Associates | BR |

Providers:  ABC - ABC TI,  EAS - EASY,  FXD - Deviat

Demand trips to be scheduled. The Interactive Scheduler can schedule them on any of the available vehicles and/or fixed routes in the Vehicles List.

Vehicle event = 5 current cell = 0

Select Schedule Date: 05/11/09 [5/11/2009]

Remove Ref Trip Load Schedule Update Schedule

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**Vehicle List**

| Vehicle | Tour | Desc                           | TotMi | XDist | TrTime | XTime | Penalty | SvcMi | SvcMi% | TotTime | SvcTime | SvcTime% | Trips | Trips/Hr | STime   |
|---------|------|--------------------------------|-------|-------|--------|-------|---------|-------|--------|---------|---------|----------|-------|----------|---------|
| A01     |      | VAN                            | .0    | .0    | 00:00  | 00:00 | .0      | 0     | .0     | 12:00   | 00:00   | .0       | 0     | 0        | .0 0600 |
| A02     |      | VAN                            | .0    | .0    | 00:00  | 00:00 | .0      | 0     | .0     | 12:00   | 00:00   | .0       | 0     | 0        | .0 0600 |
| E01     |      | VAN                            | .0    | .0    | 00:00  | 00:00 | .0      | 0     | .0     | 12:00   | 00:00   | .0       | 0     | 0        | .0 0600 |
| E02     |      | VAN                            | .0    | .0    | 00:00  | 00:00 | .0      | 0     | .0     | 12:00   | 00:00   | .0       | 0     | 0        | .0 0600 |
| F1A     |      | Deviated Fixed Route 1 - Run A | 16.0  | .0    | 00:38  | 00:00 | .0      | 16.0  | 100.0  | 02:30   | 01:32   | 61.6     | 9     | 3.6      | 0900    |

**Trips for Vehicle F1A - Deviated Fixed Route 1 - Run A**

| STime | P/D | DSTime | Arr  | Dwell | Dep  | Dist | Penalty | Blk                      | Time  | Amb | W/C | T/R | D/R | Zone   | Name         | Address                           | City     |
|-------|-----|--------|------|-------|------|------|---------|--------------------------|-------|-----|-----|-----|-----|--------|--------------|-----------------------------------|----------|
| 0900  | P   | 0900   | 0900 | 0:00  | 0900 | .0   | .0      | <input type="checkbox"/> | *     | 0   | 0   | R   | R   | 000000 | Start Shift  |                                   |          |
| 0900  | P   | 0900   | 0900 | 3:00  | 0903 | .0   | .0      | <input type="checkbox"/> | 00:03 | 1   | 0   | T   | R   | 501519 | Route, Fixed | Granite Run Mall                  | MEDIA    |
| 0910  | D   | 0910   | 0903 | 3:00  | 0906 | .2   | .0      | <input type="checkbox"/> | 00:03 | 0   | 0   | T   | R   | 501519 | Route, Fixed | RIDDLE MEMORIAL HOSPITAL          | MEDIA    |
| 0915  | P   | 0915   | 0906 | 3:00  | 0918 | .0   | .0      | <input type="checkbox"/> | 00:08 | 1   | 0   | T   | R   | 501519 | Route, Fixed | RIDDLE MEMORIAL HOSPITAL          | MEDIA    |
| 0925  | D   | 0925   | 0923 | 3:00  | 0926 | 2.2  | .0      | <input type="checkbox"/> | 00:08 | 0   | 0   | T   | R   | 501519 | Route, Fixed | Media Post Office                 | MEDIA    |
| 0930  | P   | 0930   | 0926 | 3:00  | 0933 | .0   | .0      | <input type="checkbox"/> | 00:07 | 1   | 0   | T   | R   | 499499 | Route, Fixed | Media Post Office                 | MEDIA    |
| 0935  | D   | 0935   | 0937 | 3:00  | 0940 | 2.0  | 4.4     | <input type="checkbox"/> | 00:07 | 0   | 0   | T   | R   | 501519 | Route, Fixed | Springfield Mall                  | Springfi |
| 0940  | P   | 0940   | 0940 | 3:00  | 0943 | .0   | .0      | <input type="checkbox"/> | 00:03 | 1   | 0   | T   | R   | 501519 | Route, Fixed | Springfield Mall                  | Springfi |
| 0945  | D   | 0945   | 0944 | 3:00  | 0947 | .2   | .0      | <input type="checkbox"/> | 00:03 | 0   | 0   | T   | R   | 503519 | Route, Fixed | SPRINGFIELD HOSPITAL              | SPRING   |
| 0950  | P   | 0950   | 0947 | 3:00  | 0953 | .0   | .0      | <input type="checkbox"/> | 00:03 | 1   | 0   | T   | R   | 503519 | Route, Fixed | SPRINGFIELD HOSPITAL              | SPRING   |
| 0955  | D   | 0955   | 0953 | 3:00  | 0956 | .0   | .0      | <input type="checkbox"/> | 00:03 | 0   | 0   | T   | R   | 503519 | Route, Fixed | Healthplex Sports Club            | Springfi |
| 1000  | P   | 1000   | 0956 | 3:00  | 1003 | .0   | .0      | <input type="checkbox"/> | 00:10 | 1   | 0   | T   | R   | 503519 | Route, Fixed | Healthplex Sports Club            | Springfi |
| 1010  | D   | 1010   | 1010 | 3:00  | 1013 | 3.1  | .4      | <input type="checkbox"/> | 00:10 | 0   | 0   | T   | R   | 532510 | Route, Fixed | Lawrence Park Shopping Center     | BROOM    |
| 1015  | P   | 1015   | 1013 | 3:00  | 1018 | .0   | .0      | <input type="checkbox"/> | 00:10 | 1   | 0   | T   | R   | 532510 | Route, Fixed | Lawrence Park Shopping Center     | BROOM    |
| 1025  | D   | 1025   | 1025 | 3:00  | 1028 | 3.0  | .1      | <input type="checkbox"/> | 00:10 | 0   | 0   | T   | R   | 544483 | Route, Fixed | Newtown Square Shopping Center    | NEWTTC   |
| 1030  | P   | 1030   | 1028 | 3:00  | 1033 | .0   | .0      | <input type="checkbox"/> | 00:07 | 1   | 0   | T   | R   | 544483 | Route, Fixed | Newtown Square Shopping Center    | NEWTTC   |
| 1035  | D   | 1035   | 1037 | 3:00  | 1040 | 1.7  | 3.2     | <input type="checkbox"/> | 00:07 | 0   | 0   | T   | R   | 528489 | Route, Fixed | Delaware County Community College | MEDIA    |
| 1040  | P   | 1040   | 1040 | 3:00  | 1043 | .0   | .0      | <input type="checkbox"/> | 00:11 | 1   | 0   | T   | R   | 528489 | Route, Fixed | Delaware County Community College | MEDIA    |

Fixed Route Stops

When you click on a trip in the Trips to be Scheduled window, it automatically does a “trial” schedule of the trip on every vehicle in the list. The impact of adding the trip to vehicle’s schedule is measured in terms of added vehicle miles and travel minutes.

In this example we click on the demand trip for Thomas Jefferson and the Interactive Scheduler instantly displays the results for scheduling this trip on every vehicle in the vehicle list.

This new trip is 2.0 miles door to door. However, it will only add 4/10 mile to the Deviated Fixed Route because the client’s destination is already on the route.

**PMSIS - Interactive Scheduler - Trips on 05/11/2009**

File Edit View Tools Reports Help

Current User: Demo\_User

**Trips to be Scheduled**

| Vehicle | Status | Amb/W/C | Name              | T/R | D/R | Dist | PAddress             | PCity          | PickUp   | DAddress                       | DC |
|---------|--------|---------|-------------------|-----|-----|------|----------------------|----------------|----------|--------------------------------|----|
| EAS     |        | AMB     | JEFFERSON, THOMAS | T   | D   | 2.0  | 86 E 5TH ST          | MEDIA          | 09:30:00 | SPRINGFIELD HOSPITAL           | SP |
| EAS     |        | AMB     | POLK, JAMES       | T   | D   | 2.8  | 212 Bishop Hollow Rd | NEWTOWN SQUARE | 1000     | Surgical Orthopedic Associates | BR |

Providers:  ABC - ABC T,  EAS - EASY,  FXD - Deviat

Vehicle List

| Vehicle | Tour | Desc                   | TotMi | XDist | TrTime | XTime | Penalty | SvcMi | SvcMi%   | TotTime | SvcTime | SvcTime% | Trips | Trips/Hr | STime |
|---------|------|------------------------|-------|-------|--------|-------|---------|-------|----------|---------|---------|----------|-------|----------|-------|
| A01     |      | VAN                    | .0    | 2.0   | 00:00  | 00:04 | 0       | 2.0   | 134161.9 | 12:00   | 00:10   | 1.5      | 1     | .1       | 0600  |
| A02     |      | VAN                    | .0    | 2.0   | 00:00  | 00:04 | 0       | 2.0   | 134161.9 | 12:00   | 00:10   | 1.5      | 1     | .1       | 0600  |
| E01     |      | VAN                    | .0    | 2.0   | 00:00  | 00:04 | 0       | 2.0   | 134161.9 | 12:00   | 00:10   | 1.5      | 1     | .1       | 0600  |
| E02     |      | VAN                    | .0    | 2.0   | 00:00  | 00:04 | 0       | 2.0   | 134161.9 | 12:00   | 00:10   | 1.5      | 1     | .1       | 0600  |
| F1A     |      | Deviated Fixed Route 1 | .0    | 2.0   | 00:00  | 00:04 | 22.8    | 16.4  | 102.6    | 02:30   | 01:39   | 66.3     | 10    | 4.0      | 0900  |
|         |      |                        | 16.0  | .4    | 00:38  | 00:04 |         |       |          |         |         |          |       |          |       |

Trips for Vehicle F1A - Deviated Fixed Route 1

| STime | P/D | OSTime | Arr  | Dwe  | WC  | T/R  | D/R | Zone   | Name         | Address                        |                                |
|-------|-----|--------|------|------|-----|------|-----|--------|--------------|--------------------------------|--------------------------------|
| 0900  | P   | 0900   | 0900 | 0.00 | 0.0 | 0    | R   | 000000 | Start Shift  |                                |                                |
| 0900  | P   | 0900   | 0900 | 3.00 | 0.0 | 0    | T   | 493477 | Route, Fixed | Granite Run Mall               |                                |
| 0910  | D   | 0910   | 0903 | 3:00 | .2  | 0    | T   | 492479 | Route, Fixed | RIDDLE MEMORIAL HOSPITAL       |                                |
| 0915  | P   | 0915   | 0906 | 3:00 | .0  | 0    | T   | 492479 | Route, Fixed | RIDDLE MEMORIAL HOSPITAL       |                                |
| 0925  | D   | 0925   | 0923 | 3:00 | 2.2 | 0    | T   | 499499 | Route, Fixed | Media Post Office              |                                |
| 0930  | P   | 0930   | 0926 | 3:00 | .0  | 0    | T   | 499499 | Route, Fixed | Media Post Office              |                                |
| 0930  | P   | 0930   | 0933 | 3:00 | .0  | 0    | T   | 502499 | Route, Fixed | 86 E 5TH ST                    |                                |
| 0935  | D   | 0935   | 0941 | 3:00 | 2.0 | 12.4 | 0   | 0      | 501519       | Route, Fixed                   | Springfield Mall               |
| 0940  | P   | 0940   | 0944 | 3:00 | .0  | 0    | T   | 501519 | Route, Fixed | Springfield Mall               |                                |
| 0945  | D   | 0945   | 0948 | 3:00 | .2  | 5.4  | 0   | 0      | 503519       | Route, Fixed                   | SPRINGFIELD HOSPITAL           |
| 0950  | P   | 0950   | 0951 | 3:00 | .0  | 0    | T   | 503519 | Route, Fixed | SPRINGFIELD HOSPITAL           |                                |
| 0950  | D   | 1000   | 0954 | 3:00 | .0  | 7.4  | 0   | 0      | 503519       | Route, Fixed                   | SPRINGFIELD HOSPITAL           |
| 0955  | D   | 0955   | 0957 | 3:00 | .0  | 3.4  | 0   | 0      | 503519       | Route, Fixed                   | Healthplex Sports Club         |
| 1000  | P   | 1000   | 1000 | 3:00 | .0  | 0    | T   | 503519 | Route, Fixed | Healthplex Sports Club         |                                |
| 1010  | D   | 1010   | 1010 | 3:00 | 3.1 | .6   | 0   | 0      | 532510       | Route, Fixed                   | Lawrence Park Shopping Center  |
| 1015  | P   | 1015   | 1013 | 3:00 | .0  | 0    | T   | 532510 | Route, Fixed | Lawrence Park Shopping Center  |                                |
| 1025  | D   | 1025   | 1025 | 3:00 | 3.0 | .1   | 0   | 0      | 544483       | Route, Fixed                   | Newtown Square Shopping Center |
| 1030  | P   | 1030   | 1028 | 3:00 | .0  | 0    | T   | 544483 | Route, Fixed | Newtown Square Shopping Center |                                |

Impact of adding the new trip to the fixed route.

Right click on the fixed route in the Vehicle List to add the trip to the schedule.

**Vehicle List**

| Vehicle | Tour | Desc                           | TotMi | XDist | TrTime | XTime |
|---------|------|--------------------------------|-------|-------|--------|-------|
| A01     |      | VAN                            | .0    | 2.0   | 00:00  | 00:04 |
| A02     |      | VAN                            | .0    | 2.0   | 00:00  | 00:04 |
| E01     |      | VAN                            | .0    | 2.0   | 00:00  | 00:04 |
| E02     |      | VAN                            | .0    | 2.0   | 00:00  | 00:04 |
| F1A     |      | Deviated Fixed Route 1 - Run A | .0    | 2.0   | 00:00  | 00:04 |

Right click on the vehicle/fixed route and select Add Trip to this Vehicle

Add Trip to this Vehicle  
 Clear Map  
 Highlight All Stops  
 Route All Stops  
 Zoom Highlighted Stops  
 Calculate Route

The demand trip is now a part of the deviated fixed route F1A for Monday 05/11/09.

| Vehicle List |      |                                |       |       |        |       |         |       |        |         |         |          |       |          |         |
|--------------|------|--------------------------------|-------|-------|--------|-------|---------|-------|--------|---------|---------|----------|-------|----------|---------|
| Vehicle      | Tour | Desc                           | TotMi | XDist | TrTime | XTime | Penalty | SvcMi | SvcMz% | TotTime | SvcTime | SvcTime% | Trips | Trips/Hr | STir    |
| A01          |      | VAN                            | .0    | .0    | 00:00  | 00:00 | .0      | .0    | .0     | 12:00   | 00:00   |          | .0    | 0        | .0 060  |
| A02          |      | VAN                            | .0    | .0    | 00:00  | 00:00 | .0      | .0    | .0     | 12:00   | 00:00   |          | .0    | 0        | .0 060  |
| E01          |      | VAN                            | .0    | .0    | 00:00  | 00:00 | .0      | .0    | .0     | 12:00   | 00:00   |          | .0    | 0        | .0 060  |
| E02          |      | VAN                            | .0    | .0    | 00:00  | 00:00 | .0      | .0    | .0     | 12:00   | 00:00   |          | .0    | 0        | .0 060  |
| F1A          |      | Deviated Fixed Route 1 - Run A | 16.4  | 0     | 00:39  | 00:00 | .0      | 16.4  | 100.0  | 02:30   | 01:39   |          | 66.3  | 10       | 4.0 090 |

| Trips for Vehicle F1A - Deviated Fixed Route 1 - Run A |     |        |      |       |      |      |         |  |  |     |        |                   |                          |  |
|--|-----|--------|------|-------|------|------|---------|--|--|-----|--------|-------------------|--------------------------|--|
| STime  | P/D | OSTime | Arr  | Dwell | Dep  | Dist | Penalty |  |  | D/R | Zone   | Name              | Address                  |  |
| 0900   | P   | 0900   | 0900 | 0:00  | 0900 | .0   |         |  |  | R   | 000000 | Start Shift       |                          |  |
| 0900   | P   | 0900   | 0900 | 3:00  | 0903 | .0   |         |  |  | R   | 493477 | Route, Fixed      | Granite Run Mall         |  |
| 0910   | D   | 0910   | 0903 | 3:00  | 0906 | .2   |         |  |  | R   | 492479 | Route, Fixed      | RIDDLE MEMORIAL HOSPITAL |  |
| 0915   | P   | 0915   | 0906 | 3:00  | 0918 | .0   |         |  |  | R   | 492479 | Route, Fixed      | RIDDLE MEMORIAL HOSPITAL |  |
| 0925   | D   | 0925   | 0923 | 3:00  | 0926 | .2   |         |  |  | R   | 499499 | Route, Fixed      | Media Post Office        |  |
| 0930   | P   | 0930   | 0926 | 3:00  | 0933 | .0   |         |  |  | R   | 499499 | Route, Fixed      | Media Post Office        |  |
| 0930   | P   | 0930   | 0933 | 3:00  | 0936 | .4   |         |  |  | D   | 502499 | JEFFERSON, THOMAS | 86 E 5TH ST              |  |
| 0935   | D   | 0935   | 0941 | 3:00  | 0944 | 2.0  | 12.4    |  |  | R   | 501519 | Route, Fixed      | Springfield Mall         |  |
| 0940   | P   | 0940   | 0944 | 3:00  | 0947 | .0   |         |  |  | R   | 501519 | Route, Fixed      | Springfield Mall         |  |
| 0945   | D   | 0945   | 0948 | 3:00  | 0951 | .2   | 5.4     |  |  | R   | 503519 | Route, Fixed      | SPRINGFIELD HOSPITAL     |  |
| 0950   | P   | 0950   | 0951 | 3:00  | 0954 | .0   |         |  |  | R   | 503519 | Route, Fixed      | SPRINGFIELD HOSPITAL     |  |
| 0950   | D   | 1000   | 0954 | 3:00  | 0957 | .0   | 7.4     |  |  | D   | 503519 | JEFFERSON, THOMAS | SPRINGFIELD HOSPITAL     |  |
| 0955   | D   | 0955   | 0957 | 3:00  | 1000 | .0   | 3.4     |  |  | R   | 503519 | Route, Fixed      | Healthplex Sports Club   |  |
| 1000   | P   | 1000   | 1000 | 3:00  | 1003 | .0   |         |  |  | R   | 503519 | Route, Fixed      | Healthplex Sports Club   |  |

The demand trip has been added into the Fixed Routes schedule

