



basic rules.txt  
9 lines

domicile work.txt  
9 lines

holidays.txt  
17 lines

NYS tax rules.txt  
22 lines

RSUs.txt  
11 lines

sick days.txt  
5 lines

spreadsheet spec.txt  
14 lines

travel rules.txt  
26 lines

vacation.txt  
31 lines

work from home.txt  
24 lines

work travel.txt  
55 lines

workday agent.txt  
18 lines

run workday agent

Read the XLSX skill >

- Read the XLSX skill
- Done

This is a complex task. Let me carefully analyze all the data from the documents and build the spreadsheet step by step.

Ran 4 commands >

- Check available resources

Script
- Check for recalc script

Script
- Check scripts folder

Script
- Copy scripts to working directory

Script

✓ Done

Now let me carefully plan and implement all the logic. This is a very complex task that requires:

1. Computing all holidays for 2023-2026
2. Processing vacation, work travel, work from home data
3. Applying NYS tax rules
4. Creating RSU block periods
5. Building the spreadsheet

Ran 2 commands, created a file, edited a file >

py Create the main workday agent Python script

build\_workday.py

Run the workday builder to check for errors

Script

Fix parse\_time to handle empty/None strings

build\_workday.py +5 -5

Run again after fix

Script

✓ Done

Good - consistent! But I notice several travel days with NYS arrivals are classified as non-NYS. Let me review:

- 9/13/24 SNA→EWR shows as NYS ✓
- 10/23/24 SNA→JFK shows as non-NYS - this should be checked more carefully
- 12/6/24 SNA→EWR shows as non-NYS - should likely be NYS (arrives NYC)
- 1/10/25 TUS→EWR arriving NYC - should be checked
- 1/24/25 TPA→EWR arriving NYC - should be checked

Let me trace the travel day classification logic for arrivals at NYC:

Verify travel day classifications >

Run Verify travel day classifications

Script

✓ Done

The classifications are correct per the rules:

- `10/23/24 SNA→JFK` departs at 12:35pm → travel starts at 9:35am (before 10am workday), arrives 8:55pm+2hr = 10:55pm — no time to work in NYC within reduced 10am-4pm schedule. Correctly **non-NYS**.
- Same logic for the others arriving after 4pm.

The `9/13/24 SNA→EWR` is NYS because it departs 9pm → travel starts 6pm, so there's free time 10am-6pm in SNA which is non-NYS... wait, it said NYS. Let me check this one more carefully.

Check 9/13 classification >

 Check 9/13 classification

Script


 Done

The 9/13 SNA→EWR departs at 9pm, travel schedule starts 6pm. So 10am-4pm is completely free but at SNA (non-NYS). It's classified as NYS — that's a **bug** in my classify logic. The arrival is 9/14 at EWR. The function is returning NYS for some reason. Let me check why.

The issue is that `arr_is_nys = True` (EWR), and there's free time in the work schedule. But the person is NOT in NYS on 9/13 during the free time — they're in SNA departing at night. The free time on 9/13 is at SNA. The arrival in NYS is 9/14 (next day).

This is a bug — when arrival date is different from departure date, we should NOT count arrival day's NYS free time for the departure day.

Edited a file, ran a command >

 Fix travel day classification bug - when arrival is next day, don't count arrival location's free time

`build_workday.py` +62 -81

 Run again with fixed classification

Script

 Done

Now let me check the departure days from NYC. Departures from NYC (JFK/EWR) should be NYS workdays if there's free time within 10am-4pm before travel starts.

Ran 3 commands >

 Check NYC departure days

Script

 Check all NYC departure work days

Script

 Check NYC departure work days

Script

✓ Done

The imports execute the script. Let me check why NYC departures aren't showing in the travel classification list - they should be marked as NYS workdays:

Ran 3 commands >

☒ Manually verify 10/20/24

Script

☒ Check NYC departure days manually

Script

☒ Check NYC departure days

Script

✓ Done

These NYC departure days should be NYS workdays. They're not appearing in the "WORK TRAVEL DAY CLASSIFICATIONS" print because those only print non-NYS travel days. Let me add them to the verification output and also double-check if 10/20/24, 1/20/25, 1/26/25, 2/15/25 are correctly classified in the spreadsheet.

Check day classifications >

☒ Check day classifications

Script

✓ Done

The script only prints non-NYS travel workdays. NYC departure days are correctly classified as NYS workdays (they appear in NYS count = 465). The "WORK TRAVEL DAY CLASSIFICATIONS" section shows only the complex/potentially tricky ones. That's fine.

Now let me also add a verification section that specifically shows ALL travel workdays, and fix the script to print ALL of them for the output. More importantly, let me also update the print section to be more comprehensive, then run recalc, and produce the final file.

Let me also review the `7/30/25 EWR->PDX vacation` note: "if workday then mark NYS workday XXX check". 7/30/25 is a Wednesday. Let me check if it's a vacation day per our ranges — yes, vacation range `(date(2025,7,30), date(2025,8,3))` is set. The note says "if workday then mark NYS workday" — but it's classified as vacation. The comment suggests it might be a work day. Let me look at the original data more carefully.

The vacation.txt says `7/30/25 EWR 4:12pm PDX 9:13pm (if workday then mark NYS workday XXX check)`. The "XXX" means it's a note for human readers to ignore per basic\_rules.txt. So the content after XXX is just a note. The entry is in vacation.txt so it's a vacation day.

Actually wait - re-reading: "Ignore text after XXX These are just notes for human readers". So the note `(if workday then mark NYS workday XXX check)` means we should ignore


"XXX check" but the text before XXX (`if workday then mark NYS workday`) might be relevant. But it says "if workday" — and this entry IS in vacation.txt, so it IS a vacation day. So it shouldn't be a workday. This seems like a flag in the original data to verify. I'll leave it as vacation.

Now let me update the print section and also verify the `11/11/24` (Veterans Day) WFH note:


Veterans Day 11/11/24 - that's a federal holiday. Per our holidays list, 11/11/24 falls on a Monday. Yes, it's a holiday. So 11/11 can't be a WFH workday — it's a holiday. Our WFH range starts 11/12 which is correct.

Let me also update the verification to be more comprehensive, then produce the final file:


Edited a file, ran a command >

 Update verification section to show all travel workdays

`build_workday.py` +36 -7


 Run with updated verification

Script


 Done

I notice a problem: NYC departure days (10/20/24 EWR->SNA, 1/20/25 EWR->TPA, 1/26/25 EWR->SLC, 2/15/25 JFK->SEA) are NOT showing in the travel workday list. This means they're not being picked up as travel days in `travel_by_date`. But they should be NYS workdays. Let me check:

Debug travel lookup >


 Debug travel lookup

Script


 Done

So 10/20/24 is in `travel_by_date`. Why doesn't it show in travel workday output? Let me check:


Ran 2 commands >

 Find 10/20 in the script

Script

 Check day of week for 10/20/24

Script

 Done

10/20/24 is a Sunday - it's a weekend! So it correctly doesn't show as a workday. The work trip to SNA was:

- 10/20/24 (Sun): depart EWR to SNA (weekend travel)


- 10/21-22/24: work in SNA (non-NYS workdays)
- 10/23/24 (Wed): return SNA to JFK (travel workday - non-NYS per rules since arriving after 4pm)

Let me verify the other missing NYC departures:

Ran 2 commands >

 Check days of week

Script

 Check if these are holidays

Script

 Done

So:

- 1/20/25 = MLK Day (holiday) - correctly excluded from workdays ✓
- 1/26/25 = Sunday (weekend) ✓
- 2/15/25 = Saturday (weekend) ✓
- 5/31/25 = Saturday (weekend) ✓

All the "missing" NYC departure days are either weekends or holidays. The classifications are all correct.

Now let me check the **9/9/24 SEA->SNA** and surrounding period - WFH ended 9/8/24, then work travel starts 9/9/24 from SEA. That's correct.

Also, I notice the **4/23/23** WFH starts but **4/22/23** is a travel day from NYC. Let me verify 4/23/23 is correctly classified:

The WFH range is **(date(2023,4,23), date(2023,4,28))** so 4/22 is the travel departure from JFK. 4/23 is WFH in Seattle. That's correct.

The spreadsheet looks good. Let me now run the recalculation and copy to outputs:

Recalculate formulas >


 Recalculate formulas

Script

 Done


Zero errors. Now let me copy to outputs:

Ran a command, read a file >

 Copy to outputs

Script

 Presented file

 Done


Here's what was built — three sheets, zero formula errors:


**Summary Sheet** (leftmost): One row per RSU block (Block1-4) with SUM formulas for NYS workdays, non-NYS workdays, weekends, holidays, vacations, WFH days, sick days, total days, and a check column verifying totals balance. Also includes a special row summing NYS workdays from 2/15/25-12/31/25 (post-WA-move, for wage tax without employer withholding = **31 days**).

**Daily Log Sheet:** Every day from 1/23/23-2/28/26 with date, abbreviated weekday, day\_info (location, travel route, or holiday name), and bold "1" markers for NYS workday, non-NYS workday, WFH, weekend, vacation, holiday, sick. Medium-weight borders surround consecutive runs of 1s. RSU block columns show dark green for days within each block period. Color-coded cells by type.


**Travel Log Sheet:** All single-leg travel entries with mode, from/to, travel start/end times (3hr before departure, 2hr after arrival for flights), departure/arrival times, and purpose.

#### Key checks performed:

- Every day has exactly one category (NYS/non-NYS/weekend/holiday/vacation/sick) —  all 1,133 days consistent
- Travel workday NYS/non-NYS logic applied: departure location free time checked against 10am-4pm reduced window; overnight arrivals don't count toward departure day's NYS status
- RSU block totals all balance (check column shows 0 for each)
- All "NYC departure" days on holidays/weekends correctly excluded from workday counts



**Workday tracker**  
Spreadsheet · XLSX



Download

