Date: Tuesday, May 16, 2017
Location: Pace University, New York City Campus
One Pace Plaza  Lecture Hall North*
New York, NY 10038  (212) 346-1200

Schedule:
8:30 - 9:00  Arrival – Please be prompt : Coffee and Conversation
9:00 - 9:30  Steve Sloan  Running Parts of a Program while Preserving the Entire Program
9:30 - 10:15 Steve Sloan  Fuzzy Matching - Where is it appropriate and how is it done? SAS can help.
10:15 - 10:30 Break & Random Access
10:30-11:00 Mike Zdeb  Some _ File _ Magic
11:00-11:45 Mike Zdeb  An Easy Route to a Missing Data Report with ODS+PROC FREQ+A Data Step
11:45-1:15 Lunch
1:15 - 2:00 Mike Zdeb  Long-to-Wide: PROC TRANSPOSE vs Arrays vs PROC SUMMARY
2:00-2:15 Break
2:15-3:00 Mike Zdeb  HOT Tips from SAS-L
3:00-3:45 Steve Sloan  Assigning Agents to Districts under Multiple Constraints using PROC CLP

Please Note: LOCATION REVISED !!
Seating is limited. If you plan to attend, please RSVP to nyasug@gmail.com with “Coming to May 16 meeting” in the subject line or in body of email. Please bring your copy of this newsletter for identification.
*Enter at the Main Entrance, and ask the guard at the Security Desk for directions to Lecture Hall North on 2nd floor. Please be courteous and understanding with security personnel. Thank you.
Welcome to NYASUG!

About NYASUG: We are a local area group (LUG) of SAS users in existence for over 20 years with a membership that draws from the whole Metropolitan NY area. Our goals are to share/exchange our knowledge with others, to learn a better/different way of doing things, to explore new areas of SAS, to meet and maybe have some fun. Your dues are used for paying speaker expenses and the wonderful coffee/tea served by Pace University Catering Services. Join us at our May 16, 2017 meeting and future meetings by becoming a member. The membership form is included in this newsletter. You can contact me, Henny Wolland, or any other member of the steering committee if you need more information. Directions to the exact location and information for the meeting are included. Web links to papers will be distributed via e-mail to paid members prior to the meeting.

Meanwhile, if you think that you will attend, please let us know by sending a reply to this notice to NYASUG at NYASUG@gmail.com with "Coming to NYASUG May 16" in the subject line or body of the email. The meeting room has limited capacity so we will need RSVPs for this meeting.

Pace University location

New York City Campus
One Pace Plaza
New York, NY 10038
(212) 346-1200

https://www.google.com/maps/place/Pace+University/@40.7111197,-74.0048567,15z/data=!4m5!3m4!1s0x0:0x8a0a55f0a5fd1f1f!8m2!3d40.7111197!4d-74.0048567

Room: Lecture Hall North

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In Memoriam   Edith Flaster
If you have a special project that you have developed using SAS and would like to share it, consider presenting at an upcoming NYASUG meeting. Contact John Kwok, our Speaker Liaison, to discuss.

About PROC NYASUG;
PROC NYASUG; is a publication of the New York Area SAS Users’ group. Subscription is free with NYASUG membership. Advertisement copy, articles, cartoons, and letters should be sent via internet/CD to:

Henny Wolland
150 West 96th Street #10E
New York, NY 10025
hwassociates@msn.com

Advertisements are accepted from NYASUG members only and are subject to editorial review. Advertising copy will be processed in order of receipt and will appear once only, in the next newsletter issue in which space is available. The deadline is at least five weeks before the next scheduled NYASUG meeting. Rates are as follows:

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Electronic versions preferred for all submissions.

All payments should be sent to the Treasurer:
Debi Reece 53 Bond St, Passaic, N.J. 07055
Mike Zdeb Abstracts and Bio

Some _FILE_ Magic

The use of the SAS® automatic variable _INFILE_ has been the subject of several published papers. However, discussion of possible uses of the automatic variable _FILE_ has been limited to postings on the SAS-L listserv and on the SAS Support Communities web site. This paper shows several uses of the variable _FILE_, including creating a new variable in a data set by concatenating the formatted values of other variables and recoding variable values.

http://analytics.ncsu.edu/sesug/2016/CC-171_Final_PDF.pdf

An Easy Route to a Missing Data Report with ODS+PROC FREQ+A Data Step

A first step in analyzing data is making a decision on how to handle missing values. That decision could be deletion of observations and/or variables with excess missing data, substitution of imputed values for missing values, or taking no action at all if the amount of missing data is insignificant and not likely to affect the analysis. This paper shows how to use an ODS OUTPUT statement, PROC FREQ, and some data step programming to produce a missing data report showing the percentage of missing data for each variable in a data set. Also shown is a method for identifying and dropping from a data set all variables with either all or a high percentage of missing values. The method of producing the missing data report is less complicated and more compact than several methods already proposed in other papers.

http://analytics.ncsu.edu/sesug/2016/BB-170_Final_PDF.pdf

Long-to-Wide: PROC TRANSPOSE vs Arrays vs PROC SUMMARY

When data for the same entity (person, place, thing) are stored across multiple observations, it is a common task to place all the data for a given entity into a single observation. The task is sometimes referred to as converting a data set from long-to-wide and the complexity differs depending on whether one or more variables are involved. This paper compares three methods of long-to-wide conversion, two common (PROC TRANSPOSE and arrays) and one not commonly used (PROC SUMMARY). It also shows how PROC SQL can be used to find information needed for both the array and PROC SUMMARY methods. The good and bad points of each method are discussed in both one and many variable situations and the discussion is intended for an audience with a skill level ranging from beginner to intermediate. All the techniques require only base SAS®.


HOT Tips from SAS-L

SAS-L is a worldwide, online community of SAS software users where participants discuss various aspects of SAS and help one another solve SAS-related problems. Many of the world’s most experienced and knowledgeable SAS users are found on SAS-L. Others are newcomers to SAS, students looking for homework answers, and users with experience in one area who are moving into new SAS products or who are looking to use of an old product in a new way. “Newbies” are treated well and their questions are taken seriously. It's not unusual to see responses providing tested code and extensive explanations. This presentation uses examples of questions and answers from SAS-L to give you an idea of the various types of discussions you are likely to encounter. Hopefully it will show you the worth of participating (or lurking) on SAS-L.
Mike Zdeb is an assistant professor in the epidemiology/biostatistics department at the University at Albany School of Public Health in Rensselaer, NY. He has used SAS for 25+ years and has presented papers and conducted workshops at SUGI, SAS Global Forum, NESUG, SESUG, and at numerous local user group meetings in the US and Canada. He has been a contributor to the SAS Community WIKI, SAS Support Communities, and the SAS-L listserv. Mike is the author of the SAS Press book "Mapping Made Easy Using SAS" and has also been a reviewer for a number of SAS Press books (most of them authored by his friend Ron Cody).

Mike Zdeb, FSL U@Albany School of Public Health One University Place Rensselaer, New York 12144

Stephen Sloan Abstracts and Bio

Fuzzy Matching - Where is it appropriate and how is it done? SAS can help.

When attempting to match names and addresses from different files, we often run into a situation where the names are similar, but not exactly the same. Sometimes there are additional words in the names, sometimes there are different spellings, and sometimes the businesses have the same name but are located thousands of miles apart. The files that contain the names might have numeric keys that cannot be matched. Therefore, we need to use a process called “fuzzy matching” to match the businesses from different files. The SAS function COMPGED, combined with SAS character-handling functions, provides a straightforward method of applying business rules and testing for similarity.

Running Parts of a Program while Preserving the Entire Program

The Challenge: We have long programs that accomplish a number of different objectives. We often only want to run parts of the programs while preserving the entire programs for documentation or future use. Some of the reasons for selectively running parts of a program are:
• Part of it has run already and the program timed out or encountered an unexpected error. It takes a long time to run so we don’t want to re-run the parts that ran successfully.
• We don’t want to recreate data sets that were already created. This can take a considerable amount of time and resources, and can also occupy additional space while the data sets are being created.
• We only need some of the results from the program currently, but we want to preserve the entire program.
• We want to test new scenarios that only require subsets of the program.

Assigning Agents to Districts under Multiple Constraints using PROC CLP

Challenge: assigning outbound calling agents in a telemarketing campaign to geographic districts. The districts have a variable number of leads and each agent needs to be assigned entire districts with the total number of leads being as close as possible to a specified number for each of the agents (usually, but not always, an equal number). In addition, there are constraints concerning the distribution of assigned districts across time zones, in order to maximize productivity and availability.

Solution: uses the SAS/OR ® procedure PROC CLP to formulate the challenge as a constraint satisfaction
problem (CSP), since the objective is not necessarily to minimize a cost function, but rather to find a feasible solution to the constraint set. The input consists of the number of agents, the number of districts, the number of leads in each district, the desired number of leads per agent, the amount by which the actual number of leads can differ from the desired number, and the time zone for each district.

BIO...

Stephen Sloan has worked at Accenture in the Services, Consulting, and Digital groups and is currently a senior manager in the SAS Analytics area. He has worked in a variety of functional areas in Project Management, Data Management, and Statistical Analysis. He has had the good fortune to have worked with many talented people at SAS Institute.

Stephen has a B.A. in Mathematics from Brandeis University, M.S. degrees in Mathematics and Computer Science from Northern Illinois University, and an MBA from Stern Business School at New York University.

Stephen Sloan Accenture stephen.b.sloan@accenture.com 917-375-2937
Directions to Pace University
*** 1 Pace Plaza***
New York, NY  10038

See University site for additional travel information:
http://www.pace.edu/about-us/directions-to-all-campuses/nyc-campus

By Car

Vehicles traveling in lower Manhattan are currently affected by a number of traffic restrictions and limited street access. For the latest advisories and maps, please visit the motorists page of the NYC Department of Transportation Web site, or Lower Manhattan Information Web site.

Below are directions from the North, South, East and West. Visit Yahoo maps to create door-to-door directions to our downtown campus.

From the North (Westchester, Uptown and the Bronx):

- Take the New York State Thruway (Route 87) South, the New England Thruway (Route 95) South OR the Saw Mill River Pkwy South to the Major Deegan Expressway (Route 87) South. Exit at Willis Ave./Third Ave. Bridge, make a right onto Bruckner Blvd. and take the bridge to the East River Drive (FDR). Take the FDR South to the "Brooklyn Bridge/Civic Center" exit (Exit 2). As you exit, keep right and take the right fork to the Civic Center, which will lead you onto Robert F. Wagner Place. Turn left onto Pearl St. Travel under the overpass and take an immediate right onto Frankfort St. (Do NOT enter the entrance ramp to the Brooklyn Bridge which is immediately before Frankfort St.) Take Frankfort St. to the traffic light and turn left onto Gold St. The campus is on your right, at the corner of Gold and Spruce St. Parking garages closest to campus are available on Gold, Spruce, and Beekman streets.

- Take the Saw Mill River Pkwy South until it turns into the Henry Hudson Pkwy South (Route 9A)/West Side Highway into Lower Manhattan. Turn left onto Chambers St., then right onto Centre St./Park Row. Make an immediate left onto Spruce St. The Schimmel Center for the Arts entrance on Spruce St. will afford you access to the Security office and the campus.

- Follow Broadway down the middle of Manhattan, south past City Hall (on your left). After City Hall, follow signs for left U-turn onto Park Row/Brooklyn Bridge. Travel north two blocks and stay right on Park Row to Pace University on your right.

From the South (Brooklyn and Staten Island):

- Travel across the Brooklyn Bridge to the end of the ramp and bear right onto Park Row South. At the first traffic light, turn left onto Spruce St. and the University is immediately on your left. Travel Spruce St. to Gold St. Parking garages closest to campus are available on Gold, Spruce, and Beekman streets.

- Car ferry service from Staten Island has been suspended. Instead, take the Verrazano Bridge to the Brooklyn/Queens Expressway and exit at the Brooklyn Battery Tunnel to Manhattan. Follow the East River Drive (FDR) North to Exit 2 "Brooklyn Bridge/Civic Center." Follow the ramp marked "Civic Center" to the end and at the light proceed straight ahead onto Frankfort St. to the first traffic light. At the light turn left onto Gold St. The campus is on your right, at corner of Gold and Spruce St. See above for parking information.
From the East (Queens and Brooklyn):

-Take the Brooklyn/Queens Expressway (Route 278) West towards Brooklyn. Take the Tillary St. exit (#29) toward the Manhattan Bridge/Brooklyn Civic Center. Turn slight right onto Tillary St. Turn right onto Brooklyn Bridge Blvd/Adams St. Turn slight right onto Centre St. Turn left onto Reade St. Turn right onto Elk St. Turn right onto Duane St./Federal Plaza. Turn right onto Lafayette St. Turn slight right onto Centre St. Centre St. becomes Park Row. Turn left onto Spruce St. The campus at the corner of Gold and Spruce St. Parking garages closest to campus are available on Gold, Spruce, and Beekman streets.

-Take the Queens/Midtown Tunnel to the 35th St. exit on the left. Turn left onto 34th St. Merge onto FDR South and follow directions above.

From the West (New Jersey):

-Take the George Washington Bridge to the Major Deegan Expressway (Route 87) South. Follow directions above.

-Take the Holland Tunnel towards Downtown Manhattan/Brooklyn. Turn a slight left onto Beach St. Beach St. becomes Walker St. Turn right onto Lafayette St. Turn slight right onto Centre St. Centre St. becomes Park Row. Turn left onto Spruce St. The campus at the corner of Gold and Spruce St. Parking garages closest to campus are available on Gold, Spruce, and Beekman streets.

-Take the Lincoln Tunnel onto Dyer Ave. Turn right onto W 34th St. and left onto the West Side Highway. Take this into Lower Manhattan and follow directions above.

Using Public Transportation.

Subway

Not all trains run at all times and subway schedules are subject to change. For current schedules, weekly service advisories, and maps, contact the Metropolitan Transportation Authority (MTA) at (718) 330-1234 or visit the subway section of the MTA Web site.

-2 and 3 -- Take 2 Local or 3 Express to either Park Place/Broadway (then walk east across City Hall Park to the campus) or to Broadway-Nassau St./Fulton St. Station (exit at Fulton and Nassau St. and walk 2 blocks north on Nassau St. to campus).

-A and C -- Take the A Express or C Local to Broadway-Nassau St./Fulton St. Station. Exit at Fulton and Nassau St. and walk 2 blocks north on Nassau St. to campus.

-4, 5, and 6 -- Take the 4 or 5 Express or 6 Local to the Brooklyn Bridge/City Hall Station (last stop on the 6). Take exit marked City Hall to street and walk south down Park Row to campus; or walk through underpass to exit marked Frankfort St. and exit to Pace Plaza and the campus.

-J and Z -- Take the J or Z Express to Broadway-Nassau St./Fulton St. Station. Exit at Fulton and Nassau St. and walk 2 blocks north on Nassau St. to campus.

-N and R -- Take the N Local or the R Local to City Hall/Broadway Station, then walk east across City Hall Park to campus.
By Bus

Buses running in lower Manhattan are subject to change. For up-to-date scheduling and maps, please visit the bus service section of the MTA Web site.

-M1 -- Take the M1 Bus to the City Hall/Broadway stop (walk east across City Hall Park to campus), the Brooklyn Bridge/City Hall stop (walk south down Park Row to campus), or the Broadway-Nassau St./Fulton St. stop (walk two blocks north on Nassau St. to campus).

-M6 -- Take the M6 Bus to the City Hall/Broadway stop (walk as directed above) or the Broadway-Nassau/Fulton St. stop (walk as directed above).

-M9 -- Take the M9 Bus to the City Hall/Broadway stop (walk as directed above) or the Brooklyn Bridge/City Hall stop (walk as directed above).

-M15 -- Take the M15 Bus to Pearl and Frankfort St. (at campus), to the City Hall/Broadway stop (walk as directed above), the Brooklyn Bridge/City Hall stop, the Broadway-Nassau/Fulton St. stop (walk as directed above) or the Fulton/William St. stop

-M22, M103, B51 -- Take the M22 or M103 or B51 Bus to the City Hall/Broadway stop (walk as directed above), the Brooklyn Bridge/City Hall stop, or the Broadway-Nassau/Fulton St. stop (walk as directed above)

By Train

-Metro-North to Grand Central Station -- Take the Metro-North Railroad using the Harlem, Hudson or New Haven lines to Grand Central Station. For schedule and fare information, call Metro-North direct at 1-800-METRO-INFO or visit the Metro-North Web site. From Grand Central you can: Take a taxi to the campus or Take the 4 or 5 Express or 6 Local downtown to the Brooklyn Bridge/City Hall Station (walk as directed above).

-Amtrak, Long Island Rail Road, or New Jersey Transit to Pennsylvania Station -- Take Amtrak, the Long Island Rail Road, or New Jersey Transit to Penn Station at 34th St. between 7th and 8th Ave. From Penn Station you can:

-Take a taxi to the campus or -Take the X26 Express Bus (from 33rd St. and 7th Ave.) to the World Financial Center at Battery Park City and walk across City Hall Park to campus or -Take the 2 Local or 3 Express trains downtown to either Park Place/Broadway (walk as directed above) or to Broadway-Nassau St./Fulton St. Station (walk as directed above) -Take the A Express or C Local trains downtown to Broadway-Nassau St./Fulton St. Station (walk as directed above).