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1120 20th Street, N.W.
Washington, DC 20036

July 10, 1998

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
1919 M. St., NW, Room 222
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

RE: Ex Parte Presentation – Proxy Cost Models
CC Docket No. 96-45

Dear Ms. Salas:

The attached materials are intended to provide the Commission staff with information that will assist them in determining how a data development/cost modeling process might incorporate the characteristics of the HCPM that the staff desires to be part of a universal service cost modeling synthesis. These items, which are expanded and annotated flowcharts of the HAI v5.0a data development process from Appendix C of the HAI v5.0a Model Description, indicate:

1. the data manipulations performed at each stage of the HAI Model data development process;
2. the data sources (e.g., Metromail, D&B, PNR, BLR, NECA, etc.) with which the cost modeler must contract with if it desires to assume direct responsibility for the model's data at each particular stage;
3. the amount of time that HAI Model development experience indicates must be allowed to process a national set of data – assuming that the process algorithms are completely coded and debugged prior to starting the processing “clock”;
4. an indication of the stages of the data development process that must be repeated if the model developer wishes to alter particular input parameters or subsequently discovers an error in the model's algorithms.

Please note that the timetables outlined in the attached flowcharts are extremely aggressive. They assume that skilled personnel with prior experience developing these data are available to manage and execute these process stages, sufficient computing and storage capacity is available, and that “dirty” data are never generated by any of the processes.

Based on the Commission's desire to select a model platform that accurately and reliably incorporates the desired HCPM characteristics in an expedited manner, and provides for the greatest capability to audit and modularly adjust the model's characteristics, the HAI Model

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Secretary

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sponsors recommend the following process for incorporating the Commission's desired characteristics into a synthesized model (SM) of universal service cost.

- FCC to assume from AT&T responsibility for the process stages given on pages 2, 3 and 8 of the attached flowcharts. Either the FCC would perform these stages itself, or contract with PNR or some other organization to perform them.
- Retain PNR to continue its current responsibility for the process stages on pages 4 through 7 of the data development process.
- Request PNR to incorporate into the code of its Spatial Clustering Module the "microgridding" process and loop distribution routing and technology optimization processes of the new HCPM.
- Configure the augmented Spatial Clustering Module to report, by cluster, the quantities of each loop distribution network element that the above pro-forma optimization processes determine are required to the SM.
- Permit the SM's distribution module to attach "official" prices to the reported inventory of loop distribution network elements and calculate the implied investment cost of this portion of the network.

Please note that the HAI Model sponsors or their engineering consultants do not endorse the above procedure as the best way for a SM to be developed that adheres to the to Commission's requirements that the modeled network be both least-cost and technically capable of providing basic telephone service in accordance with Joint Board specifications at its implied level of cost. Until the HAI Model sponsors and their engineering consultants have had the opportunity to examine the final logic of the proposed SM, and the full national data set prepared for the SM, along with an appropriately comprehensive set of sensitivity runs of the model, they can offer no opinion about this model's adherence to the Commission's criteria.

Two copies of this Notice are being submitted to the Secretary of the FCC in accordance with Section 1.1206(a)(1) of the Commission's rules.

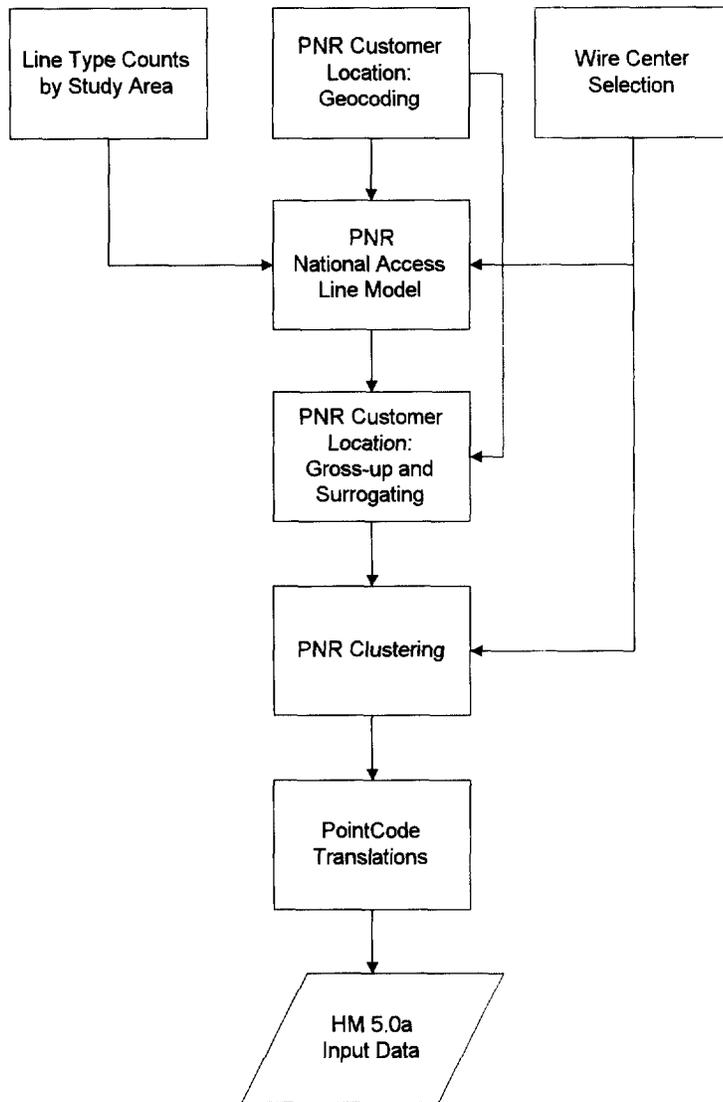
Sincerely,

Richard N. Clarke
Richard N. Clarke

Attachments

cc: Craig Brown Bryan Clopton Chuck Keller
Mark Kennet Bob Loube Jeff Prisbrey
Bill Sharkey Natalie Wales Brad Wimmer
Jim Schlichting Don Stockdale Sheryl Todd

OVERALL INPUT DATA DEVELOPMENT PROCESS

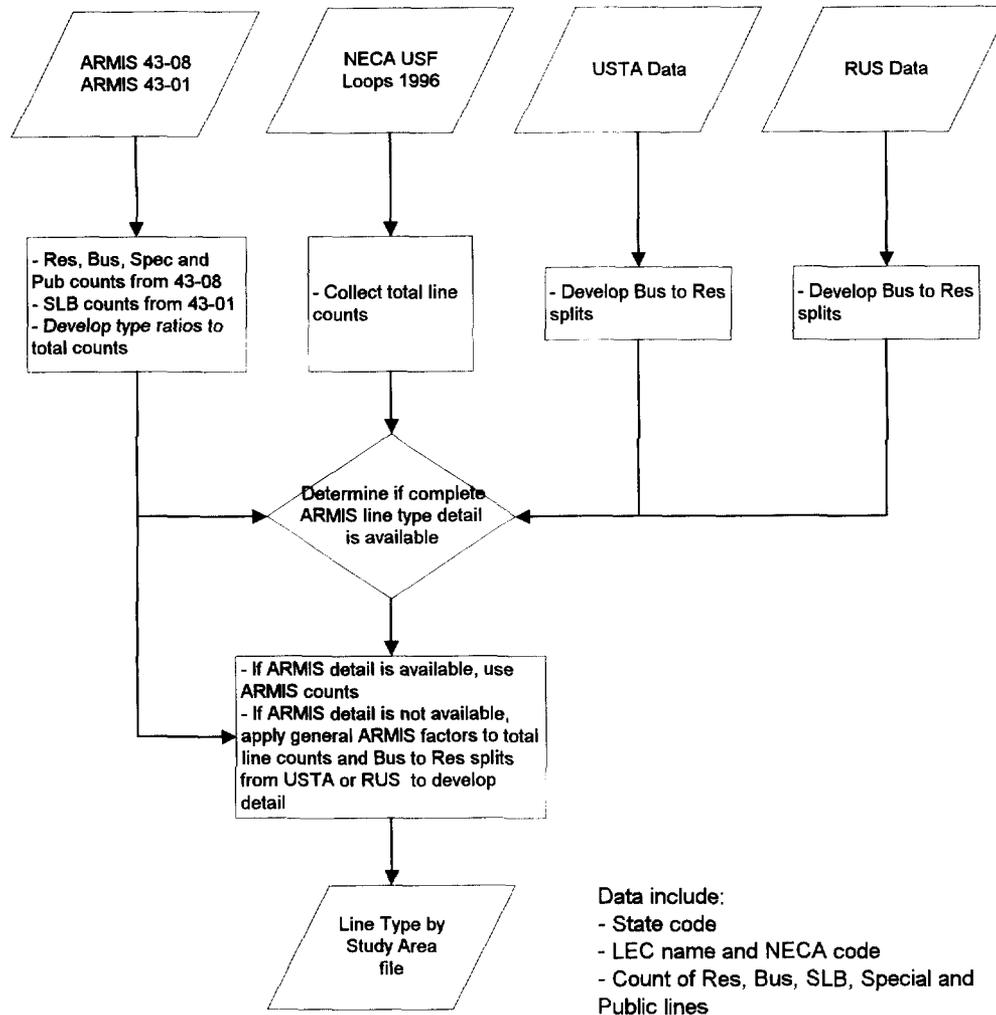


Processes in boxes at the same horizontal level can be performed in tandem. Processes in boxes at different vertical levels must be performed sequentially.

Time estimates for each stage assume:

- *no significant process changes from those currently used*
- *all input data used by each process stage are completely “clean”*
- *PNR has sufficient personnel and hardware resources available*
- *the computer systems available to execute each nonPNR stage are electronically linked, have 5 to 10 free gigabits of shared file space and two to three skilled people available to execute each process stage*

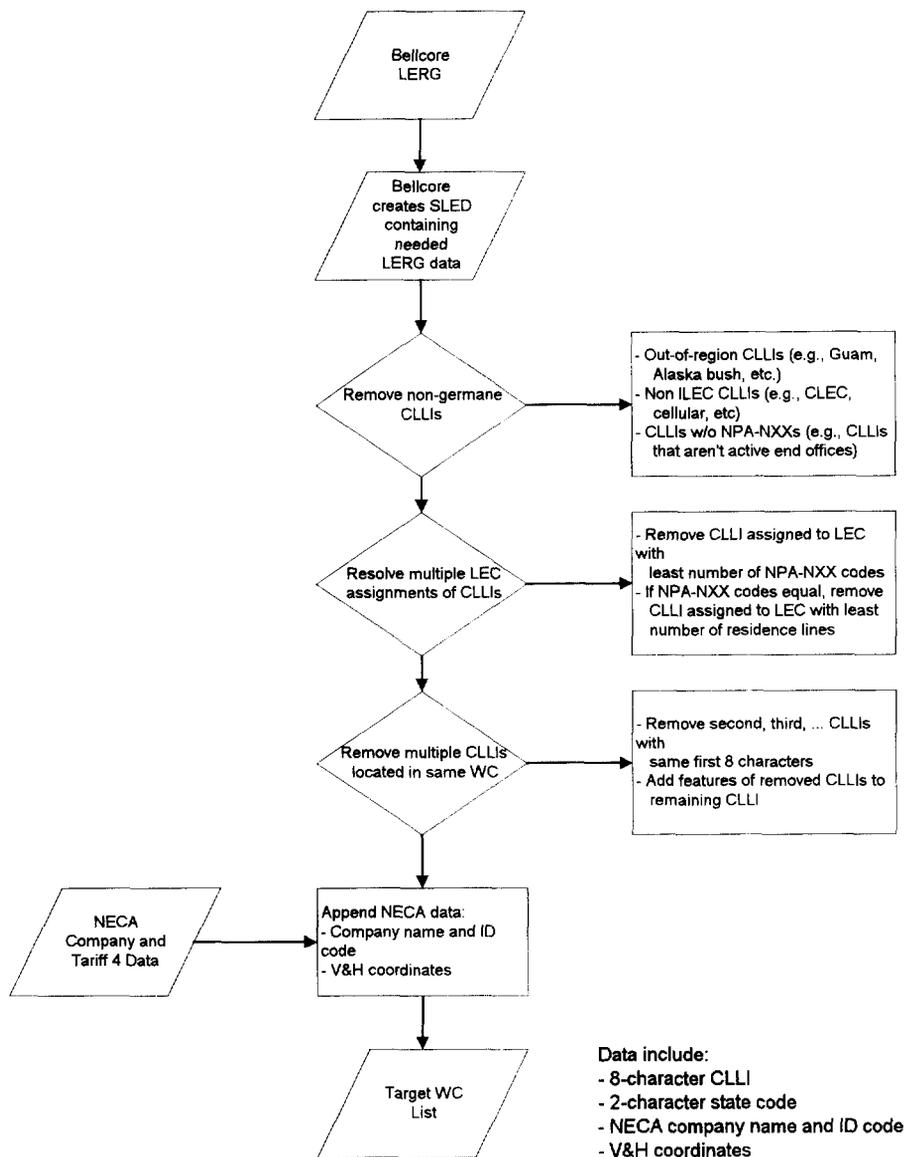
LINE TYPE COUNTS BY STUDY AREA



All of the above processes currently are performed by AT&T – but they could easily be performed by the FCC or other parties. Data are all public, available at little or no cost, and are familiar to the FCC.

Amount of time to re-execute: 2 days – assuming automated processes are in place to extract ARMIS and NECA data with no process changes

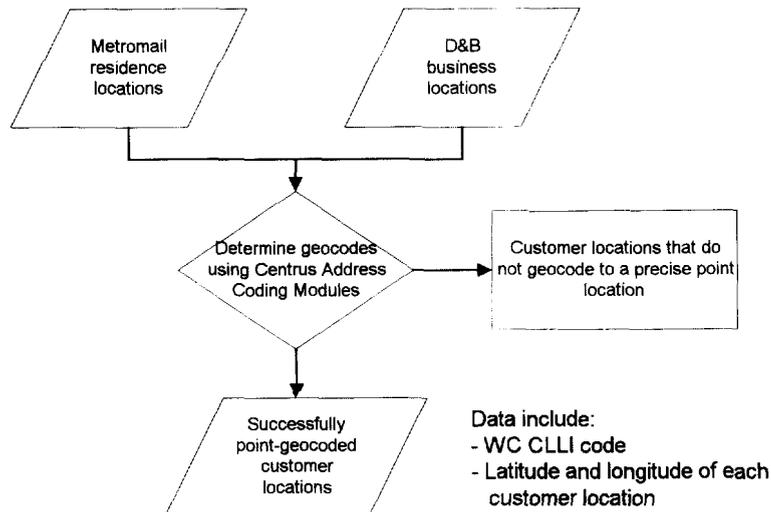
WIRE CENTER SELECTION PROCESS



All of the above processes currently are performed by AT&T. Data are all commercially available. Bellcore charges \$1000 to create the SLED.

Amount of time to re-execute: minimum of 7 days – if it is desired to reconcile all BLR data with other sources (e.g., have an exact match between LERG wirecenters and BLR wirecenters).

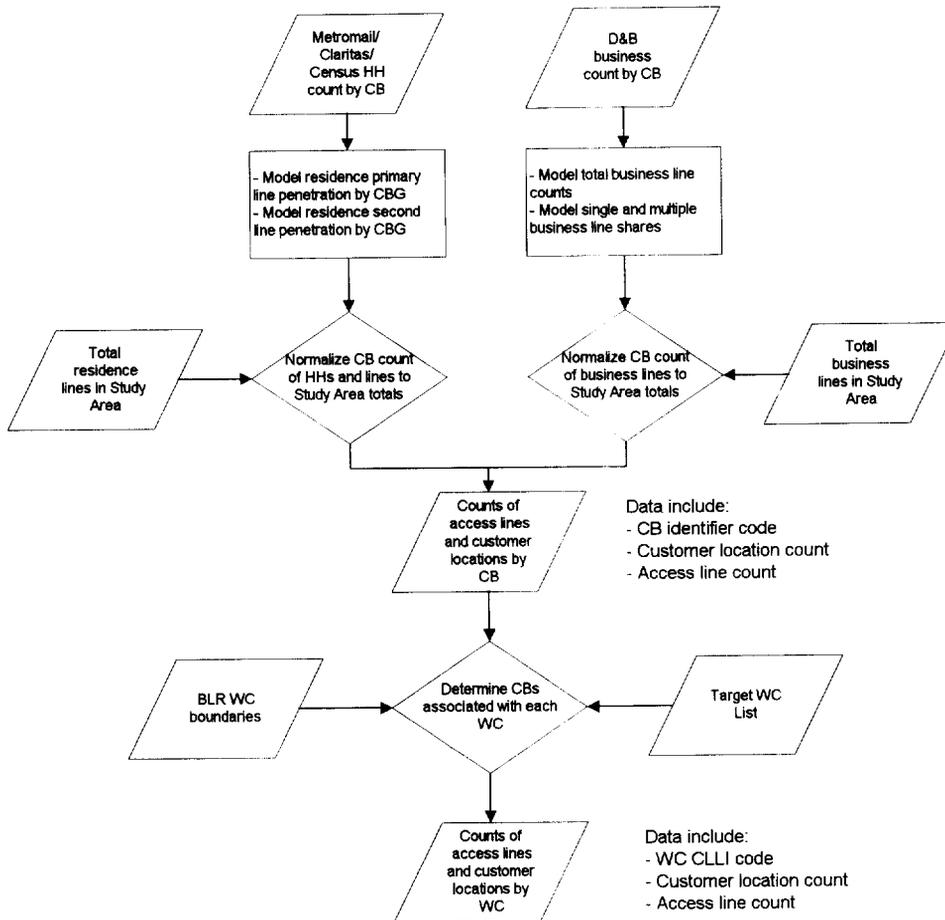
GEOCODE PROCESS



All of the above processes currently are performed by PNR – which has contracts with Metromail and D&B data sources, and purchases commercial Centrus and GDT geocoding software and data. These data are all commercially available – but at substantial fees and may be subject to nondisclosure requirements.

Amount of time to re-execute: about 10 days for the geocoding process – assuming no process changes (e.g., shifts away from the current system of address-based geocoding)

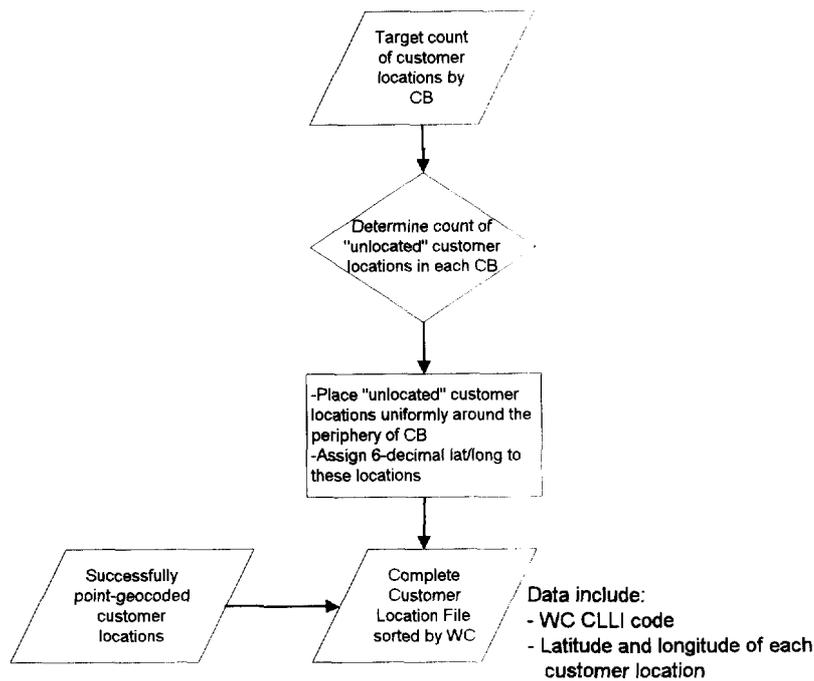
PNR NATIONAL ACCESS LINE MODEL DEVELOPMENT PROCESS



All of the above processes currently are performed by PNR – which has contracts with Claritas, Metromail, D&B and BLR data sources. Otherwise, these data are all commercially available – but at substantial fees and subject to nondisclosure requirements.

Amount of time to re-execute: about 2 days – assuming no process changes and that all input data are available and error-free. If it is desired to normalize lines by wirecenter rather than by study area, at least an additional 7 days would be required.

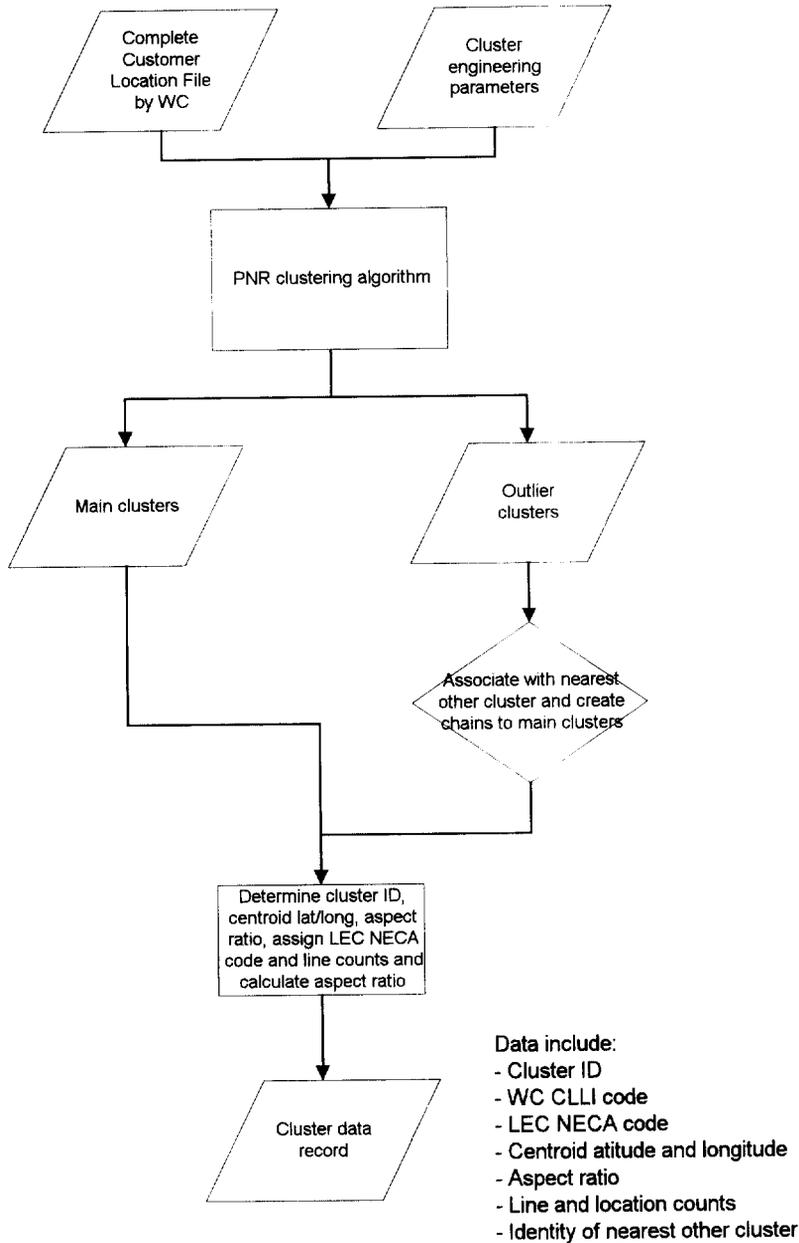
GROSS-UP AND SURROGATING PROCESS



All of the above processes currently are performed by PNR.

Amount of time to re-execute: about 5 days for the surrogating process – assuming no process changes (e.g., shifts away from current system of CB-boundary surrogating)

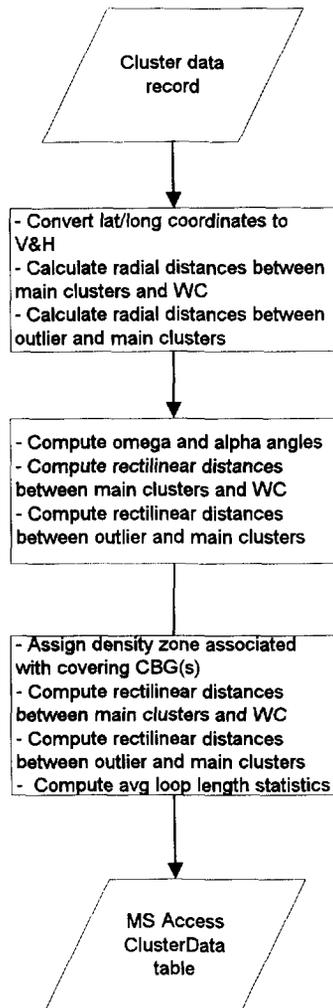
CLUSTERING PROCESS



All of the above processes currently are performed by PNR using its Spatial Clustering Module.

Amount of time to re-execute: about 8 days – assuming no process changes (e.g., calculation of MSTs in addition to current distance information)

"POINTCODE" PROCESSES



Data include:

- 2-character state code
- 8-character CLLI
- LEC name and NECA code
- Covering CBG ID
- Alpha, omega and radial distance
- Area, aspect ratio, lines density
- Terrain characteristics
- Line, household and housing unit counts
- Firm and employee counts
- Average loop length statistics

All of the above processes currently are performed by AT&T and are required to produce a dataset that is usable by the HAI Model. Because the HCPM process proposes to perform many of the distance and positioning related calculations in real time when the model is executed, they would not need to be performed here.

Amount of time to re-execute: about 15 days – assuming no process changes and a completely “clean” set of input data generated by the prior processes.