Highway

GSM Mobiles

Virginia

Virginia Location Area

GSM

GSM Databases

Virginia GSM Equipment

HLR

Other GSM Mobile

GSM Mobile

1: RR SABM + MM LOCATION UPDATING REQUEST

Virginia MSC

2: SABM + MM LOCATION UPDATING REQUEST

Virginia MSC

3: MM LOCATION UPDATING REQUEST

Virginia BSC

4: MM AUTHENTICATION REQUEST

5: MM AUTHENTICATION RESPONSE

6: MM LOCATION UPDATING ACCEPT

7: MM TMSI REALLOCATION COMPLETE

Bethesda Cell

Rockville Cell

Maryland

Maryland Location Area

Maryland GSM Equipment

Maryland GSM Equipment

Maryland MSC

Rockville Cell

Bethesda Cell
**<MM> Interfaces (GSM Originating Call)**

1. **RR SABM + MM CM SERVICE REQUEST**
2. **SCCP CONNECTION REQUEST + MM CM SERVICE**
3. **MM AUTHENTICATION REQUEST**
4. **MM AUTHENTICATION RESPONSE**

- **Cell**
  - Mobile Station
    - User

- **Mobile Network**
  - Base Stations
    - BSS
  - Mobile
    - 1:RR SABM + MM CM SERVICE REQUEST
  - Fixed Network
    - PSTN
    - MSC VLR

- **NSS**