# Data Constraints/Quality

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### **Agenda**

Section 1 Data Issues

Section 2 Legacy Systems

Section 3 Acquisition Issues

Section 4 Opportunities for Information

Section 5 Data Quality

Section 6 Impact of Better Data

Section 7 Managing Expectations



#### **Data Issues**

- → Is the data needed available anywhere in the company
- Legacy systems
- What format is the data
- → Competitive market take what you can get from the broker



#### **Data Issues**

- Data collected from Agent is often not correct or is inadequate
- Data collected by agents is not passed through all the systems
  - Summarizing of data occurs at multiple places within the company
  - Transformation of the data should be documented
    - Many times it is not
  - Code is not rewritten only modified due to costs
    - Also some fear to remove old coding due to what it could affect
    - Code becomes large and unwieldy
- Updating systems where do you get the data for the long term customers
  - Cost and Feasibility of obtaining alternative data
    - Where is it available
    - How much time it will take to update
    - Cost to update
  - Outside sources
  - Agent calls



#### **Legacy Systems**

- Policy system does not communicate with the claims system
- ▼ Tables with same field names mean different things from different systems.
- Fields are limited in space
- 7 Tables with same field names mean different things from different systems
- If Company has multiple systems
  - Whose responsibility is it to get the data
  - Cost constraints
  - Not contemplated in the budget
- Each system was designed for a specific purpose
- 7 Turf wars
  - Combining all systems is extremely costly and time consuming
  - Cost constraints
  - Not contemplated in the budget



#### **Acquisition Issues**

- Acquisitions cause companies to have many systems within the organization
  - Different IT groups for each system
  - Each IT group thinks their system is the best
  - No consistent format or naming convention
    - Same field name means something different in various systems
    - Effort to combine systems data in format needed
  - The person who wrote the code is longer around
  - Documentation is poor
- Data needed for modeling has to be pulled from various systems
  - Verifying accuracy becomes a timely challenging chore
  - Expensive and time consuming
  - Means data for modeling is not as current as company may want



#### **Opportunities for Information**

- ✓ Use time of claim as opportunity to gather information.
- Claim Adjuster information has much needed information
  - Use to populate unknown or out of date fields
  - Verify that current information is adequate
    - Especially insurance to value
  - Each IT group thinks their system is the best
- Agent or Broker contact with the customer
- Supplement with outside data
  - Multiple sources available
  - Cost will be a consideration.
- Company calls customers to survey



#### **How Much Is Enough?**

- Require minimum characteristics
  - Occupancy, Construction, Year Built, # of Stories, Sq. Footage
- 7 Create templates for underwriters, agents or brokers
  - Force agents to accommodate..(good luck)
  - Meet halfway
- Diminishing Returns
  - Review your data for accuracy or fill in blanks
    - Start with most critical locations
      - » Florida for Hurricane
      - » California, New Madrid for Earthquake
- Use the opportunity to talk to your customers and potentially cross sell new products



#### **Data Quality of Commerical Insurers**

Data Quality				
Category	U.S. Hurricane	California Earthquake	New Madrid Earthquake	Pacific Northwest Earthquake
Street or Better	75.9%	85.3%	57.2%	55.3%
Known Construction	76.7%	87.7%	89.2%	90.3%
Known Occupancy	98.3%	98.4%	98.7%	98.9%
Known Year Built	53.2%	69.1%	68.2%	81.6%
Known # Stories	42.9%	61.2%	60.2%	68.8%

- → Data shown is for large commercial writers for a large portion of the industry.
- ✓ Street or Better is lower than one might expect
  - Consider cell towers, railroads, bridges etc
- Year Built and Number of Stories are very low
  - Impact in the modeled results can be significant both higher or lower
- ▼ Values are different for different layers that a company participates
  - Different U/W areas don't communicate
    - Sometimes company doesn't realize on same risk multiple times



#### **Impact of Better Data**

- 7 In many cases better data quality will increase your model results
  - At least you are protecting your surplus more adequately
  - Buy at the level that is appropriate
  - Eliminate potential reinsurer surcharges
- More capacity provided by reinsurers due to increased confidence that they know what they are getting
- Reduced data quality charges and hopefully better pricing



## **Managing Expectations**

- Pro Active in the Data Capture Process
  - Large Schedules Push Backs
    - May not be relevant
    - May be expensive
    - Only when necessary
  - Understanding the risk of not having adequate detail
    - Strengths & Weaknesses
- Continue to Challenge the "Status Quo"
  - Running reasonability checks
  - ITV & loss ventilation into your catastrophe program
  - Claims analysis to see if your data is adequate



#### **Questions?**



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