
Developing a Government Reporting Taxonomy

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724 CAFRs from municipalities of all 50 states - only 377 were converted from PDF to HTML

<u>Statement of...</u>	Number of Statements Extracted (% of Total) <u>N=377</u>	Number of Statements Not Extracted (% of Total) <u>N=377</u>
Net Assets	324 (85.94%)	53 (14.06%)
Activities	273 (72.41%)	104 (27.59%)
Balance Sheet	270 (71.62%)	107 (28.38%)
Revenue, Expenditures and Changes	267 (70.82%)	110 (29.18%)
Net Assets - Proprietary	227 (60.21%)	150 (39.79%)
Revenue, Expenditures and Changes - Proprietary	215 (57.03%)	179 (42.97%)
Fiduciary	270 (71.62%)	107 (28.38%)
Cash Flows	272 (72.15%)	105 (27.85%)
Average	264.75 (70.00%)	114.37 (30.00%)

The Iterations

1st

- 95,000 terms consisting of duplicates, numbers and overlapping terms

2nd

- 95K reduced to 11,475 by creating an index that mapped terms to individual statements
- Dropped 8,428 terms as they only appeared in one statement

3rd

- Kept only 572 terms that were used more than 20 times in statements or 37% of the time
- 572 to 315 to by grouping term alphabetically and keeping the highest frequency terms from the group

4th

- 315 terms reviewed by government accounting expert and 81 removed
- 234 terms reduced to 194 unique terms after modifiers were removed



Final Taxonomy

194 terms + 55 modifiers = 234 terms

Modifiers (applied to 15 terms)

Beginning Balance

Ending Balance

Restricted

Unrestricted

Current

Spendable

NonSpendable

NonCurrent

ShortTerm

LongTerm

Gross

Net

Definitions were then added and the taxonomy was sent out for evaluation



Terms in the Taxonomy

- Decided on a “standard” term
- Defined terms – authoritative sources if available, textbooks
- Assigned modifiers to the terms



Demonstration - 2 preparers & 2 analysts

	Inter-rater Reliability	Agreement (Std. Dev)	T-Test $H_0=2$
Taxonomy			
Terms	90.59	2.88 (0.189)	62.99***
Definitions	78.35	2.69 (0.316)	29.75***
Additional Terms	93.99	2.91 (0.218)	55.84***

Inter-rater reliability is calculated as the joint probability of agreement (number of participants that chose the same measure of agreement (Disagree, Somewhat agree, or Agree)/3). Agreement was rated on a 3-point Likert scale (1) Disagree, (2) Somewhat agree, (3) Agree. A higher mean indicates a higher agreement with the term, definition or additional term in the taxonomy.



Conclusion

- The proposed taxonomy was demonstrated to be concise, explanatory, robust and extendible.
- Has been used to help stimulate the development of the model presented today.

