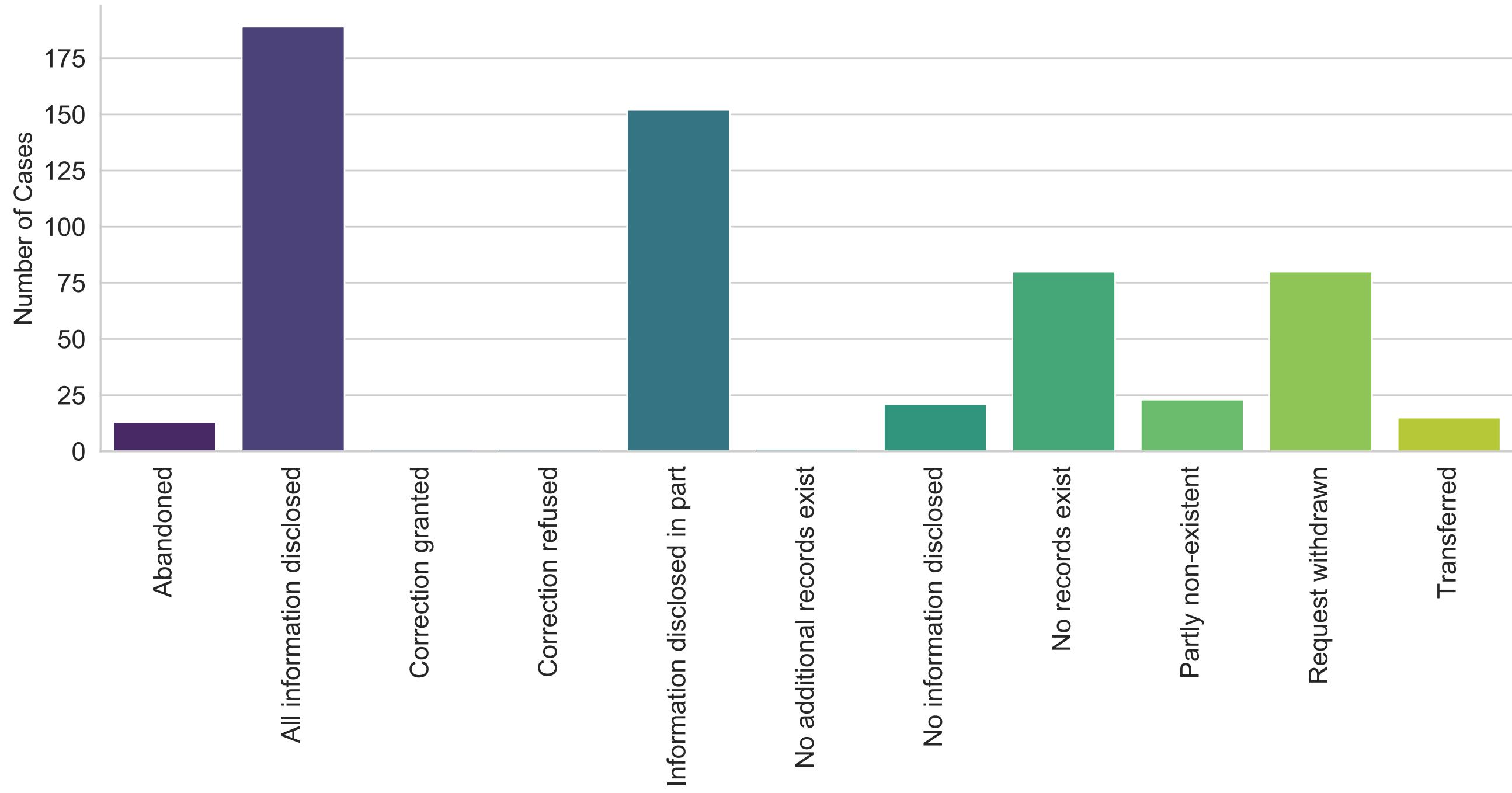
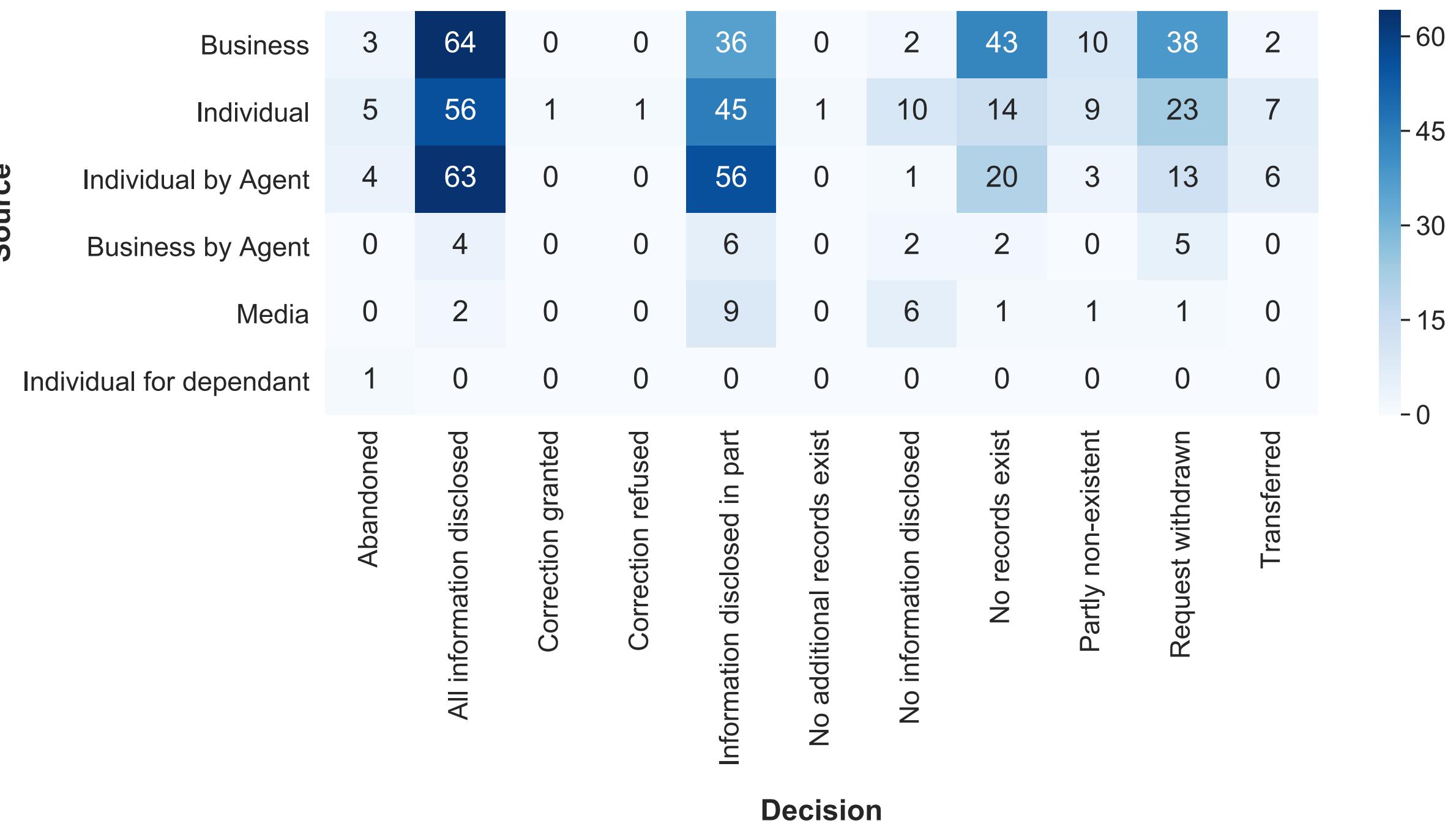


Decisions Made for all Requests

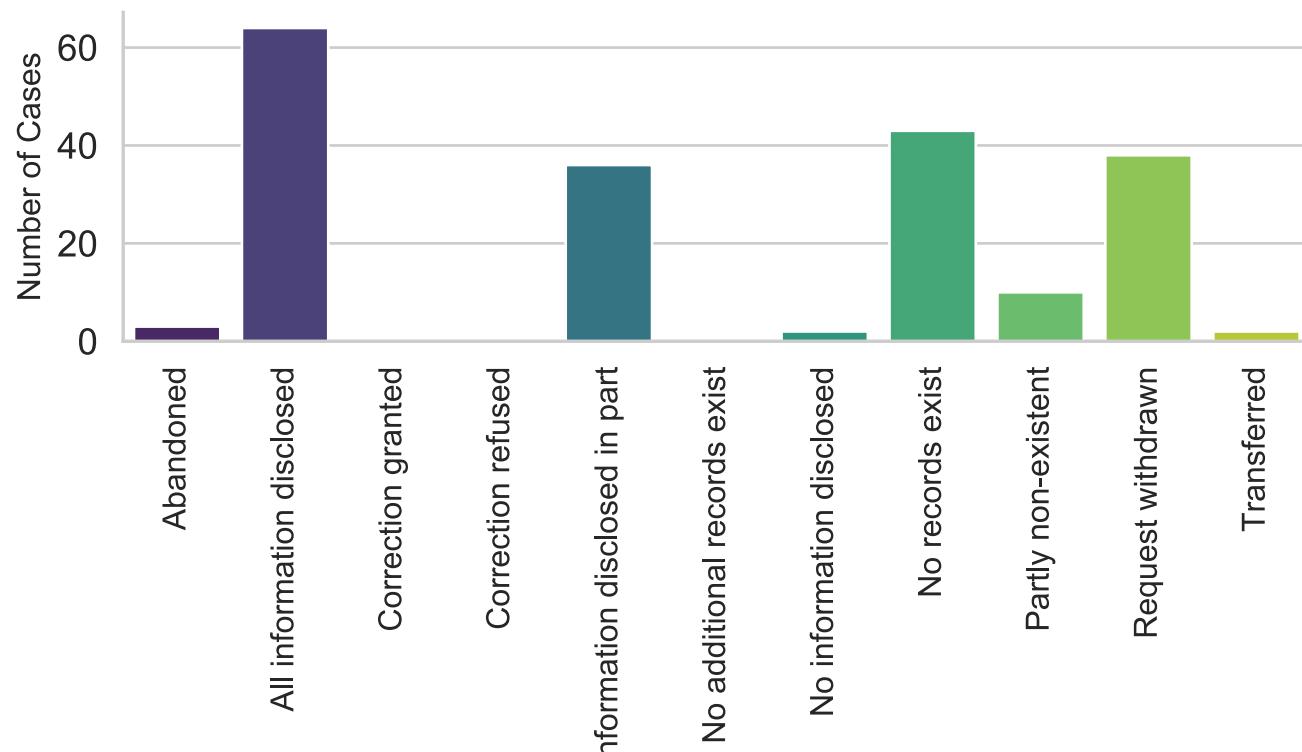


Full Data

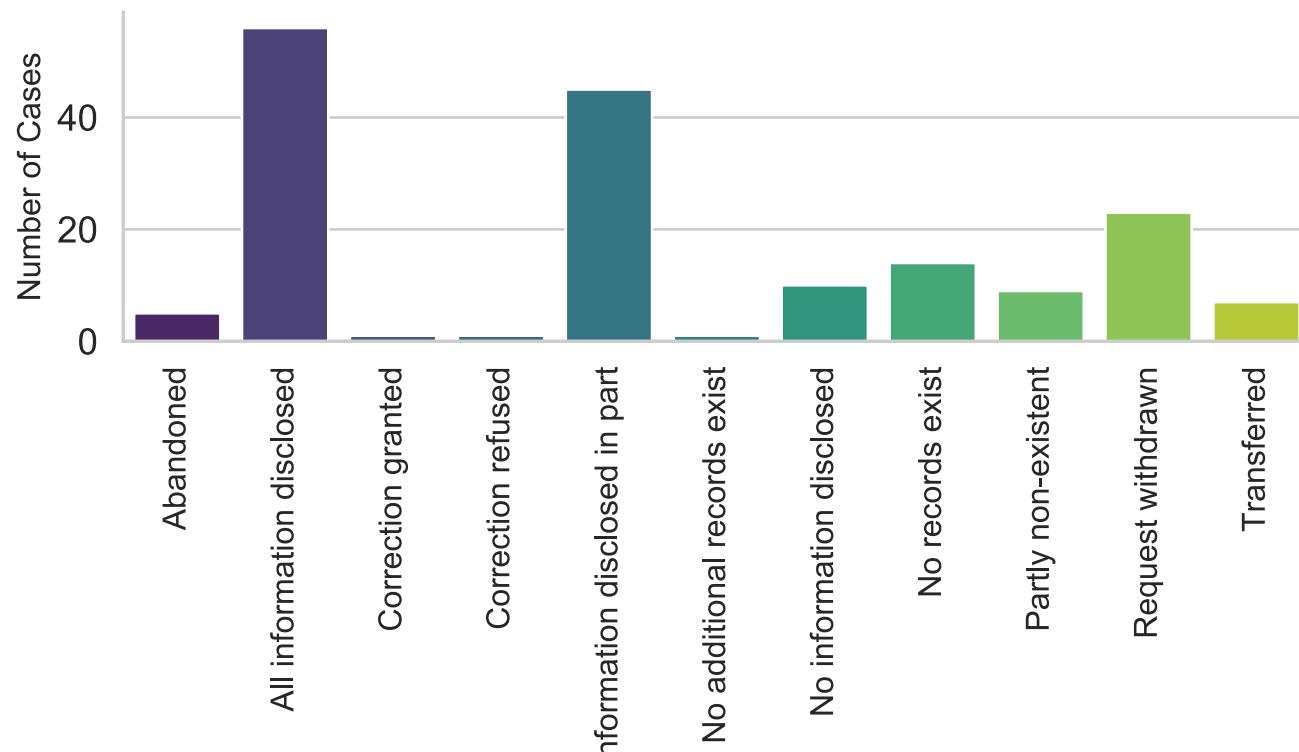


Number of cases for all type of decisions made for each of the sources

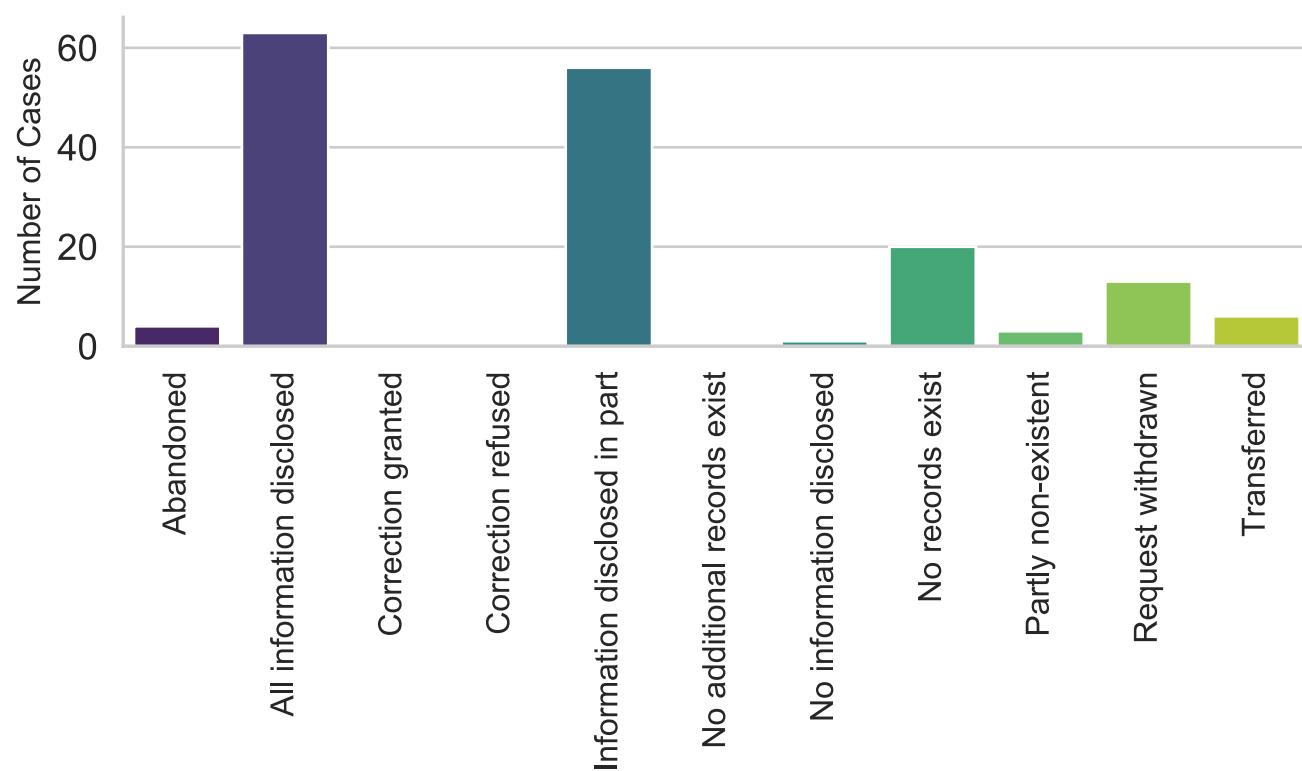
Requests made by 'Business'



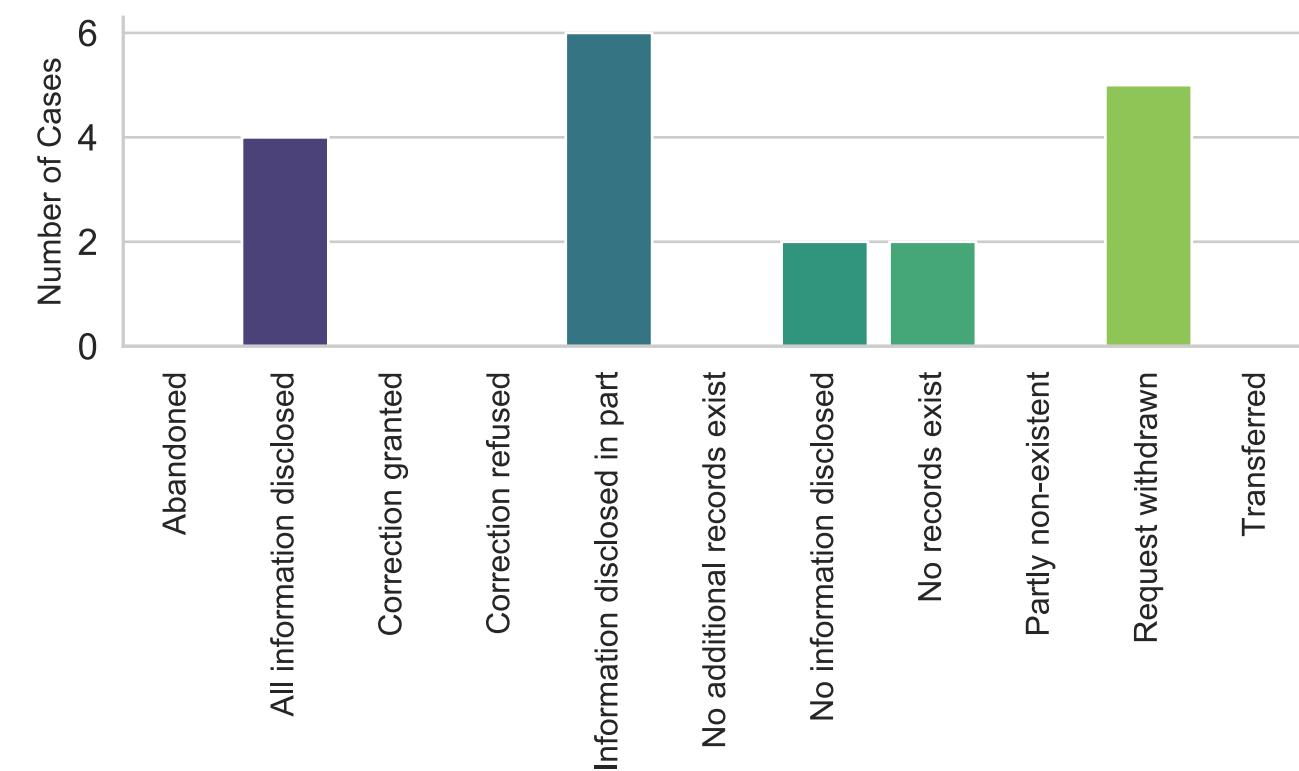
Requests made by 'Individual'



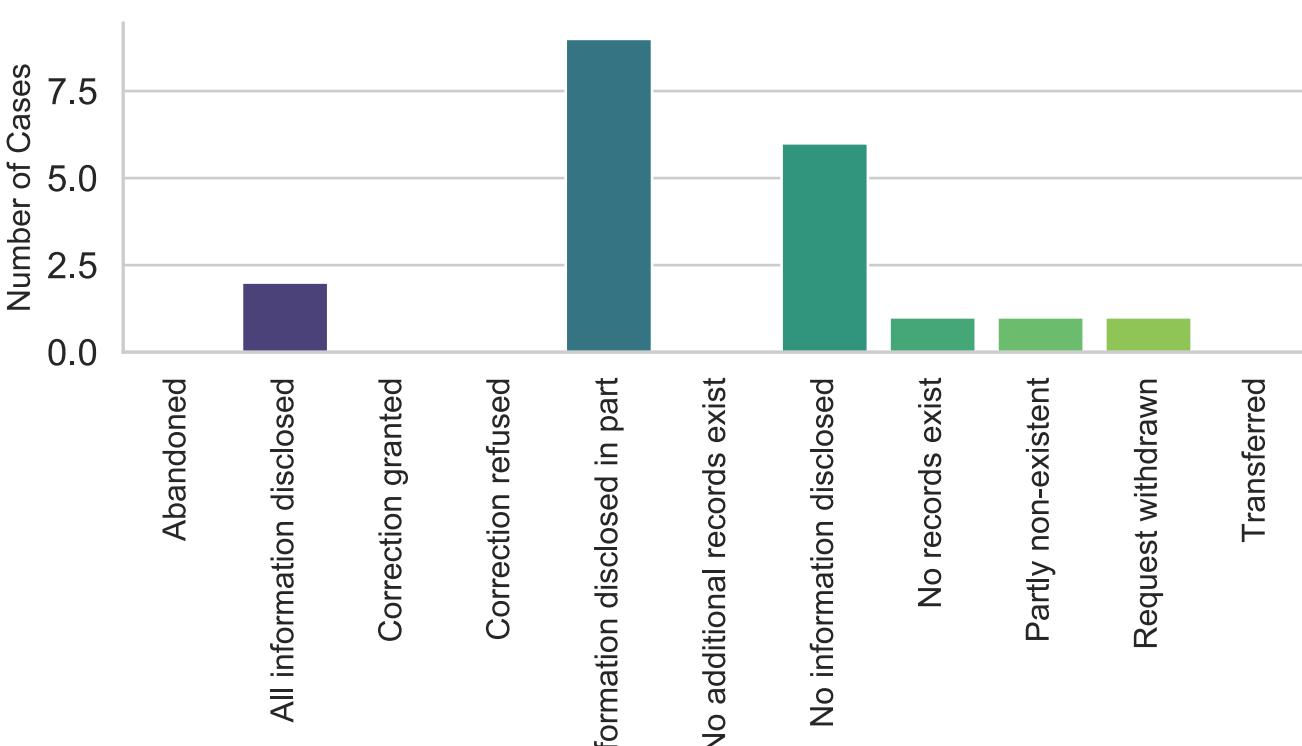
Requests made by 'Individual by Agent'



Requests made by 'Business by Agent'



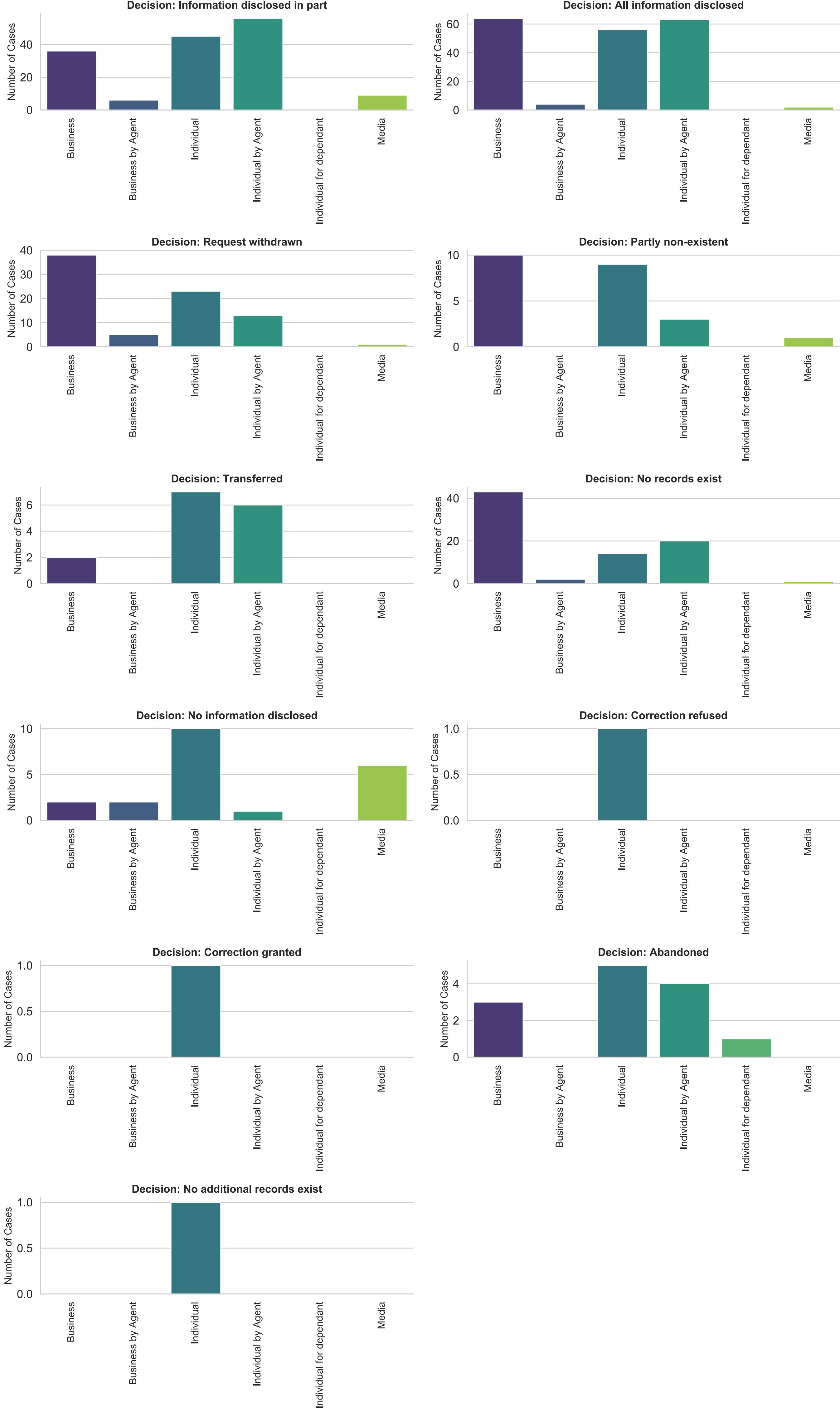
Requests made by 'Media'



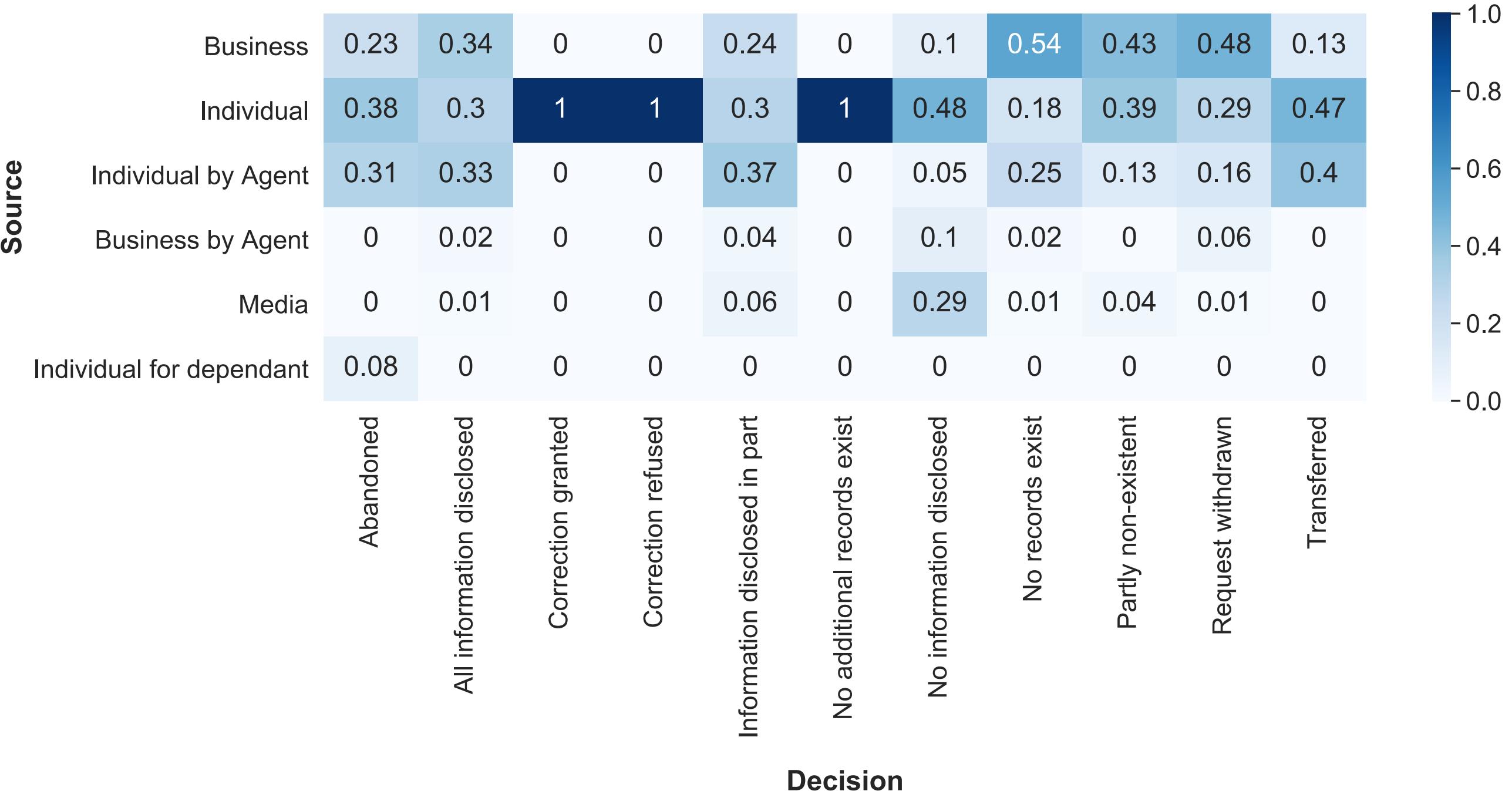
Requests made by 'Individual for dependant'



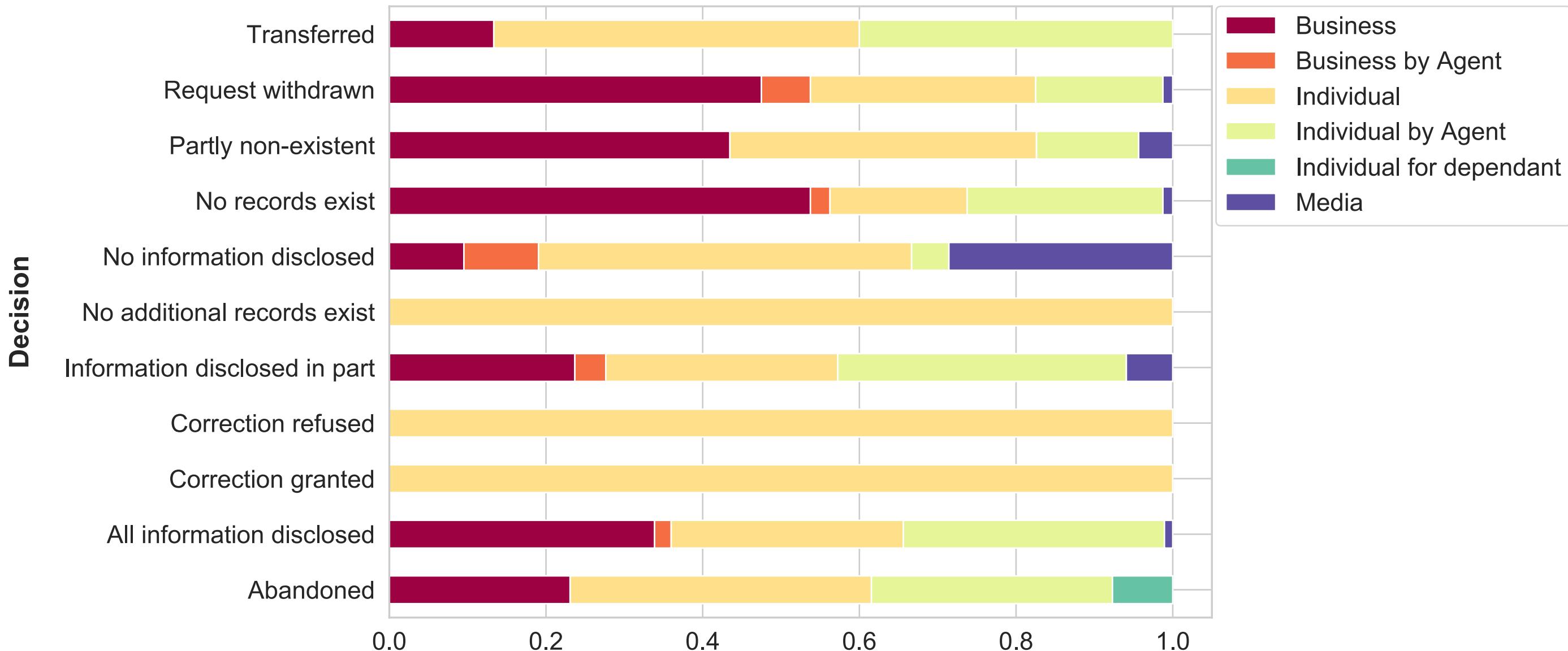
Number of cases for each type of decision made by sources



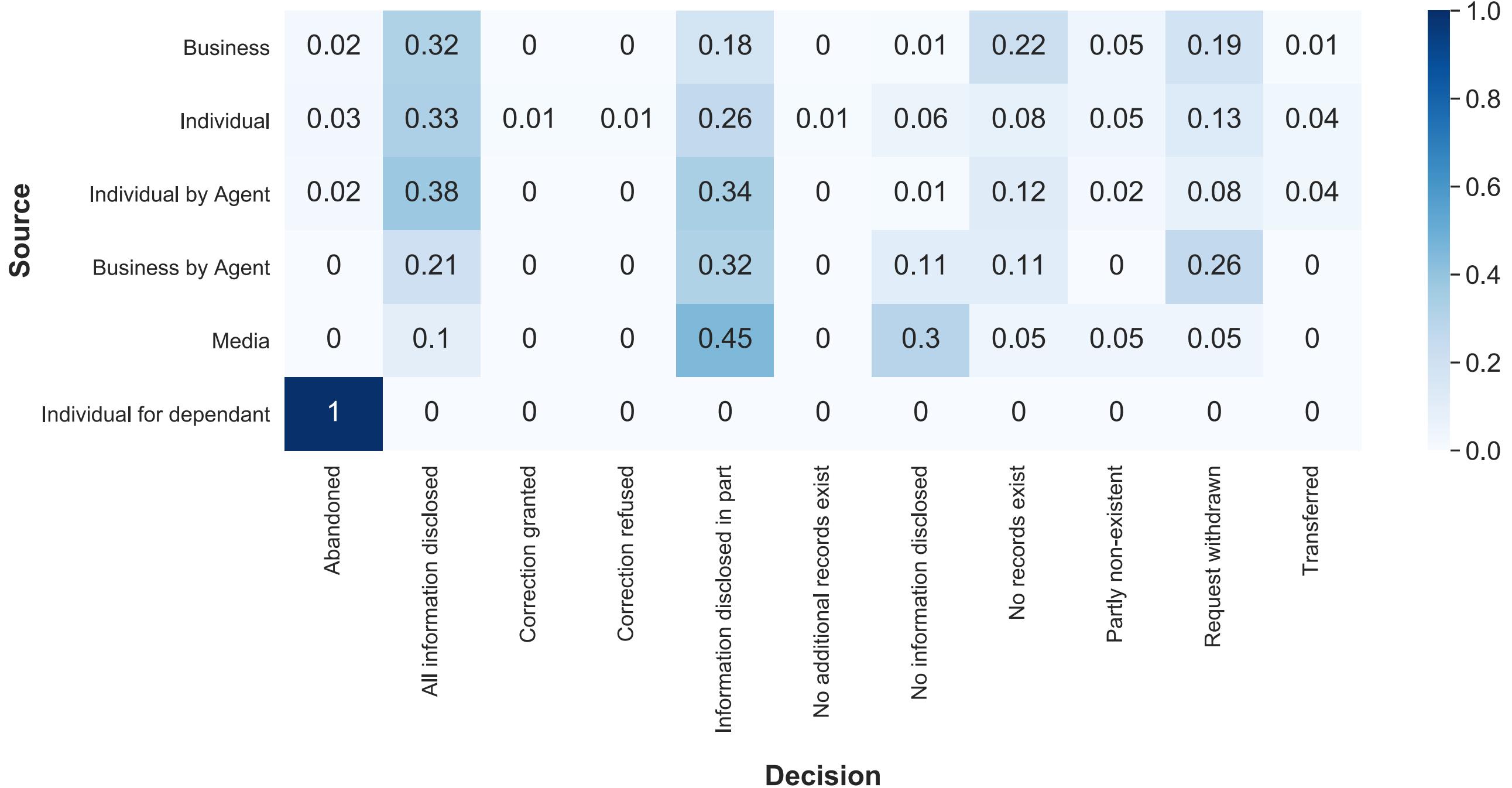
How each decision is split among all sources (fraction)



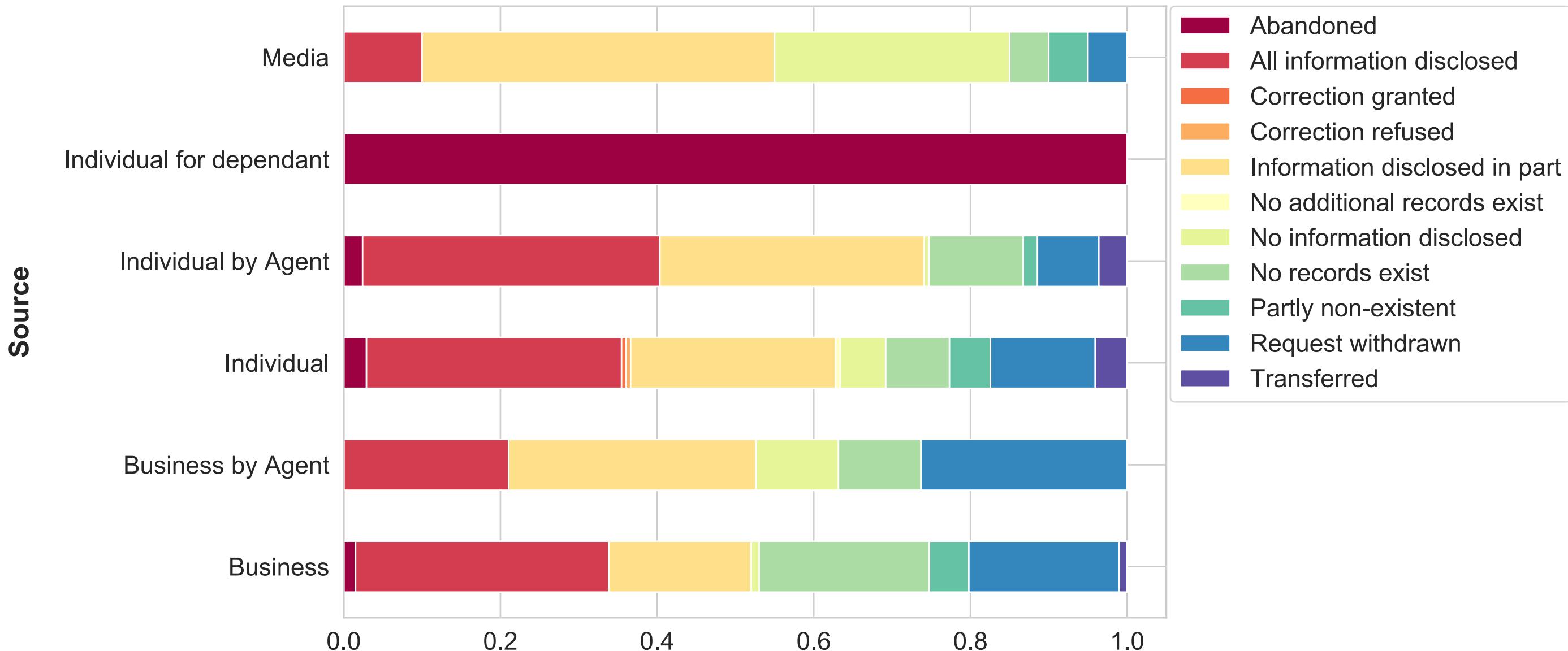
Full data, how each decision is split per source



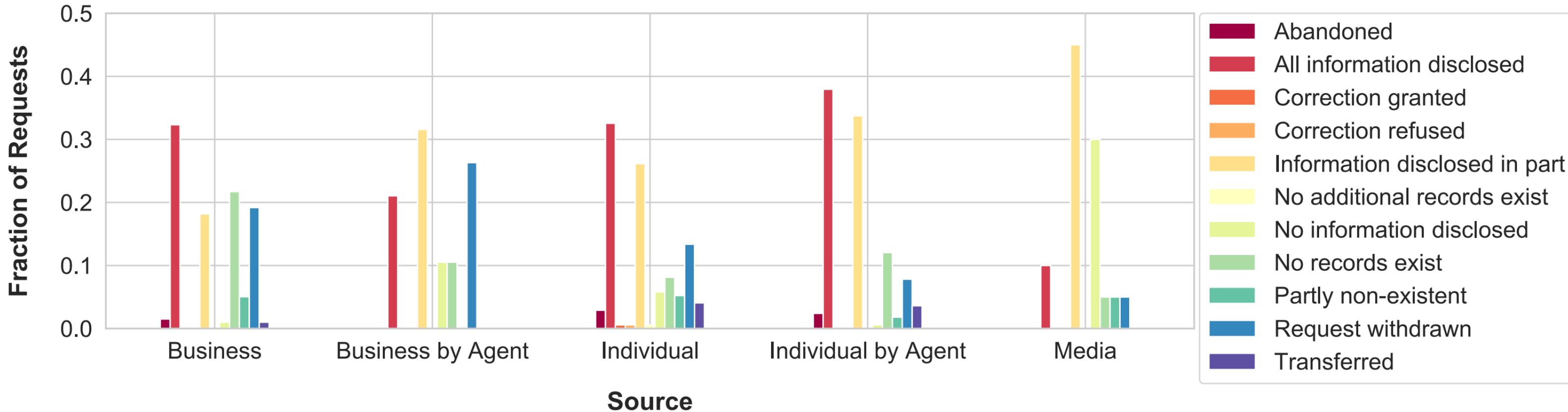
How decisions are split per source (fraction)



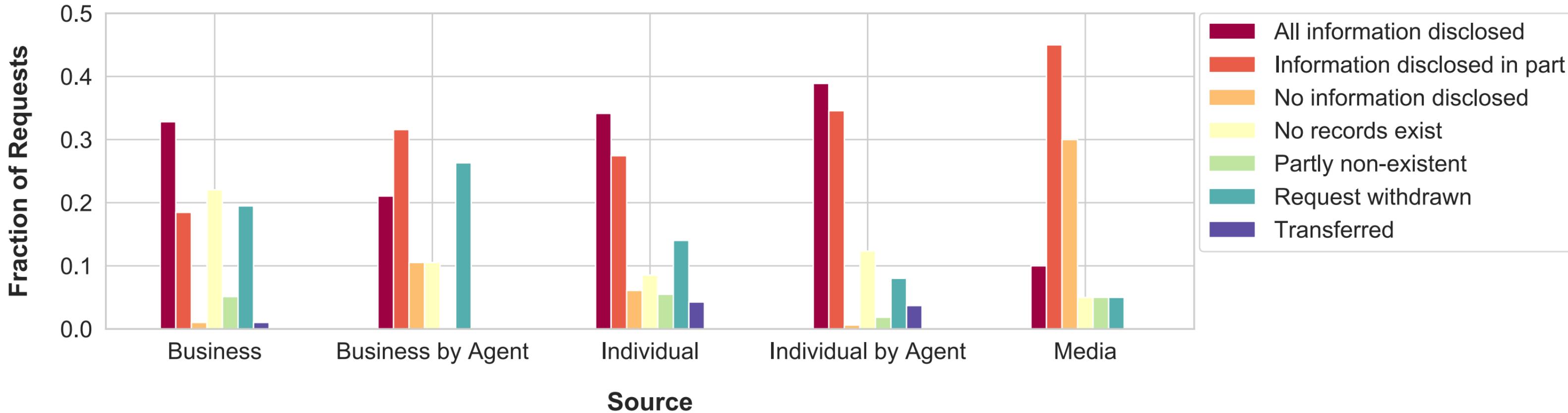
Full data, fraction of decisions per source



Full data, fraction of decisions per source



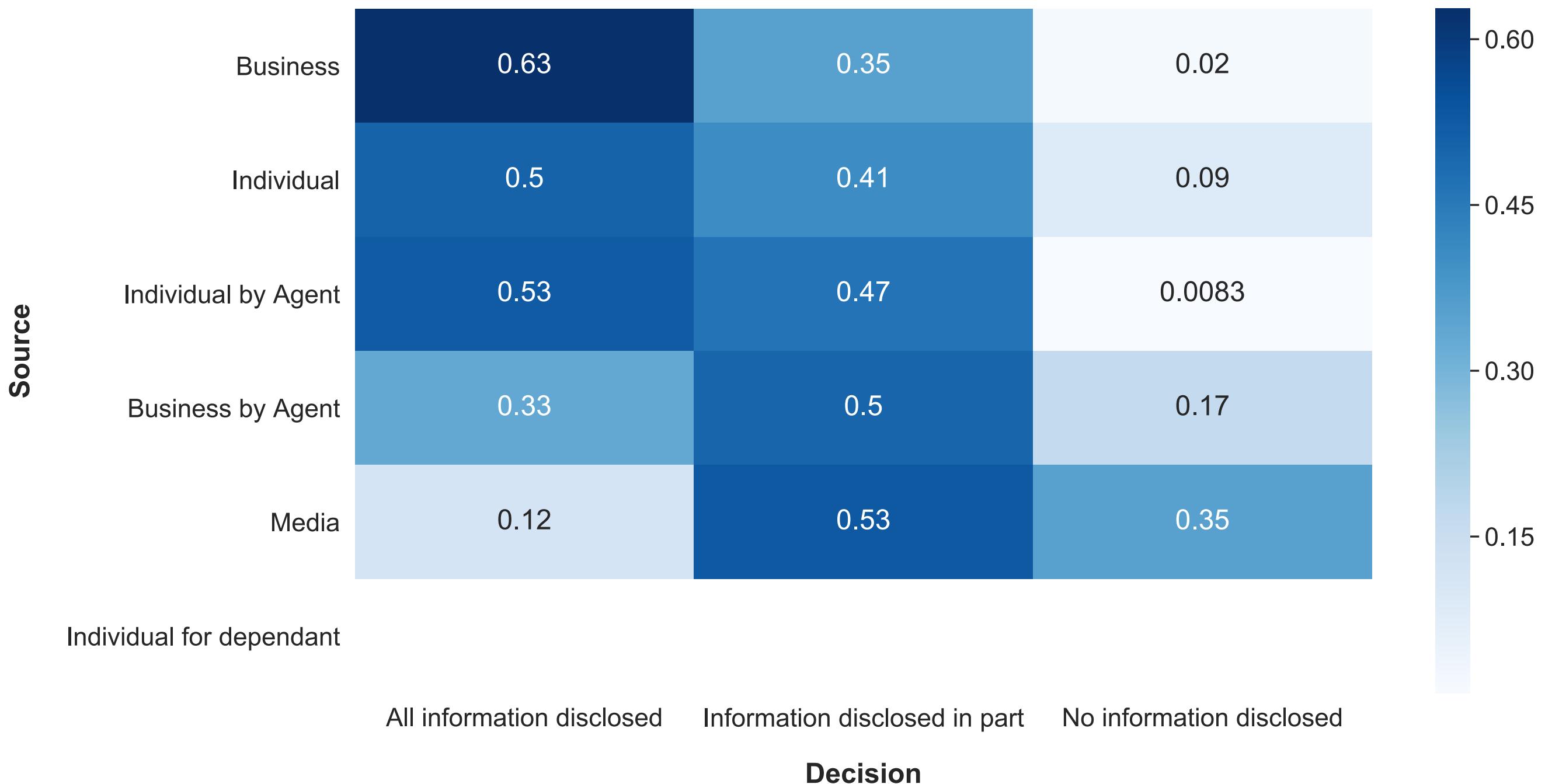
Fraction of decisions per source, for decisions with more than 15 instances only



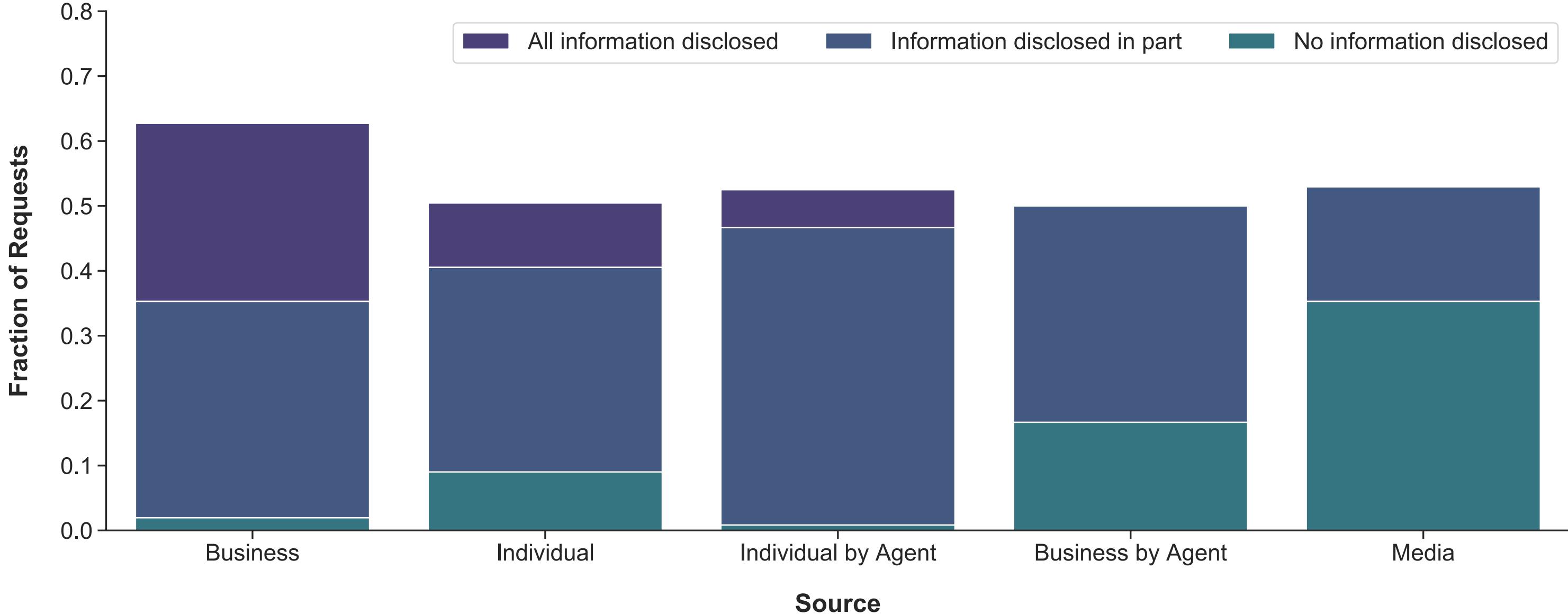
Each of the three main decisions split among all the sources (fraction)



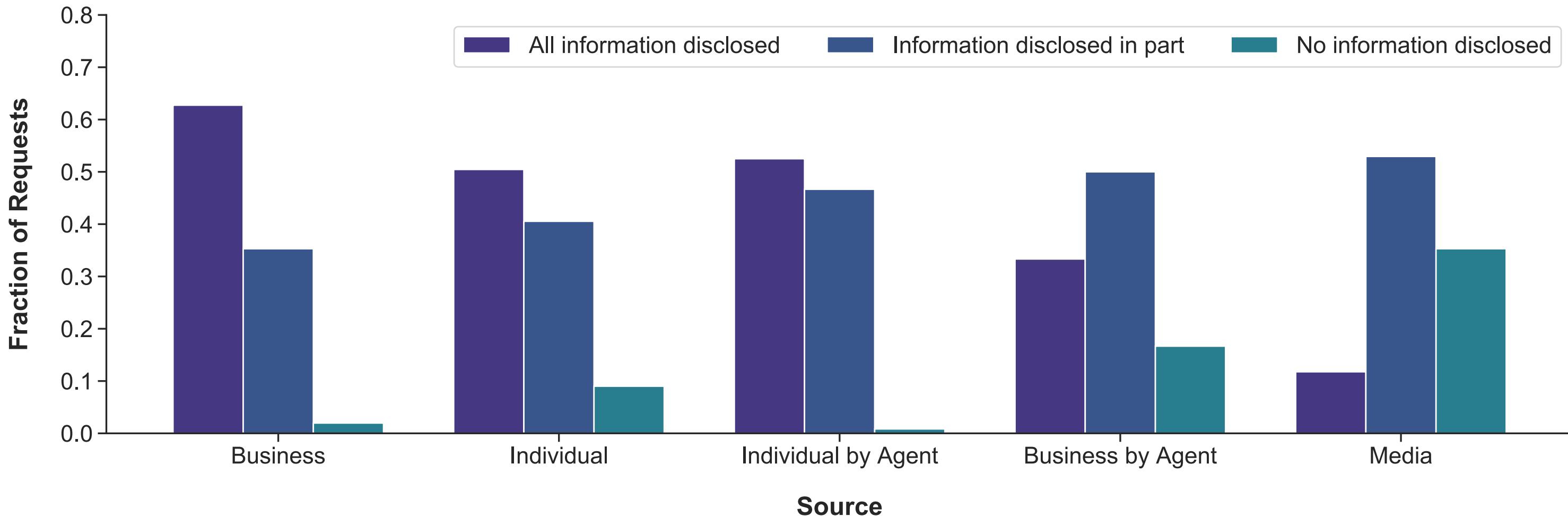
Three main decisions split for each source (fraction)



Three main decisions only, fractions for each source add to 1



Three main decisions only, fractions for each source add to 1



Top 200 unigrams/bigrams, full text



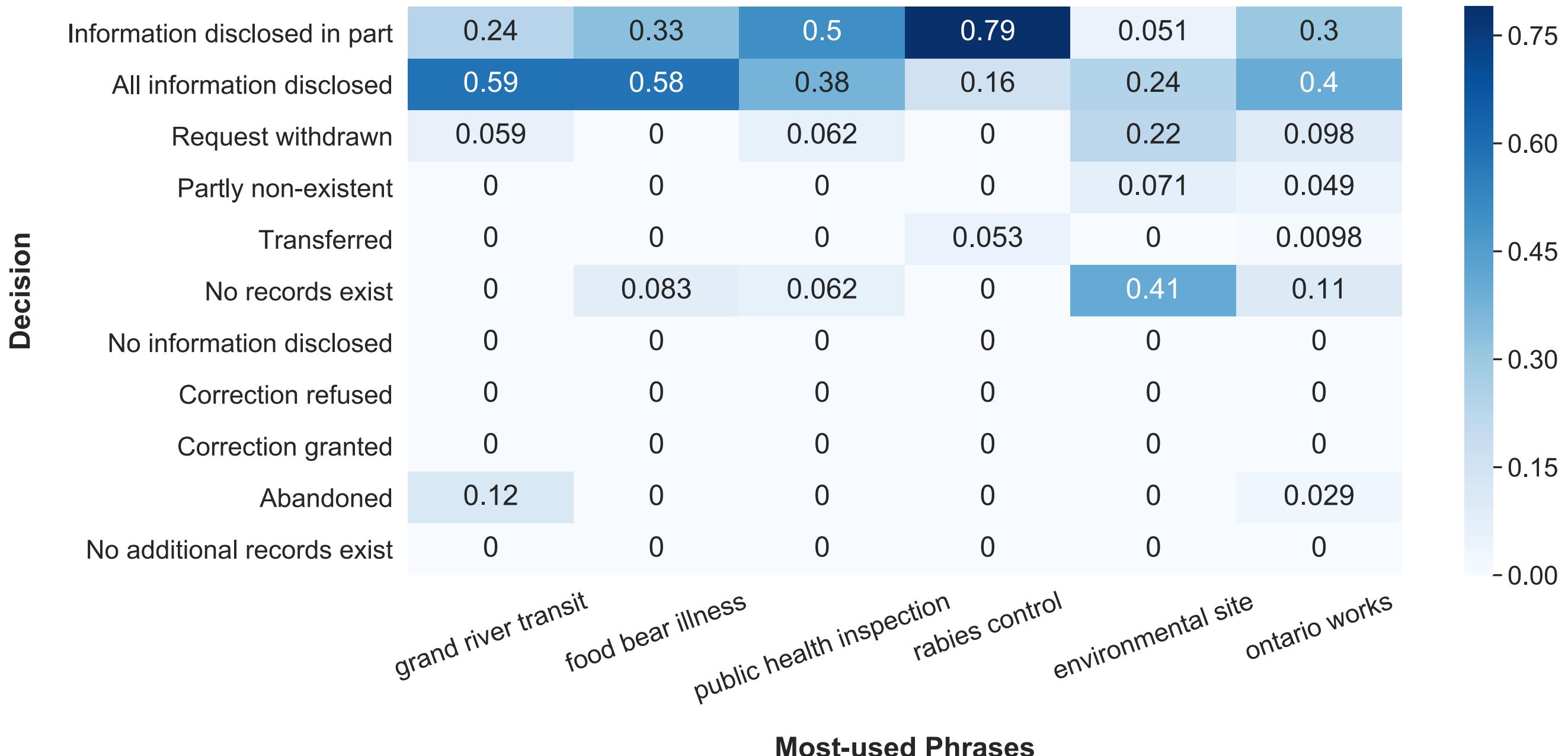
Top 200 unigrams, full text



Top 200 unigrams/bigrams, full text without '{* remove}'

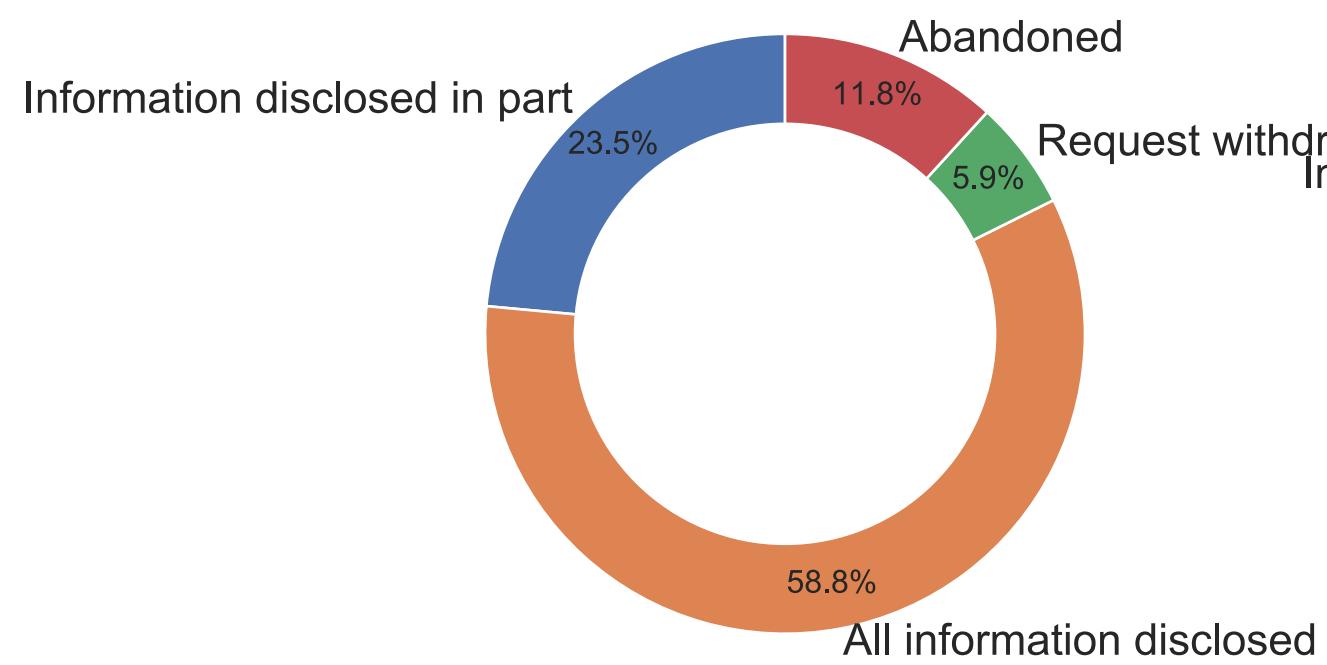
Top 200 unigrams, full text without '{* remove}'

46% of the full data uses the following phrases.
For each phrase, here is how decisions are split (fraction).

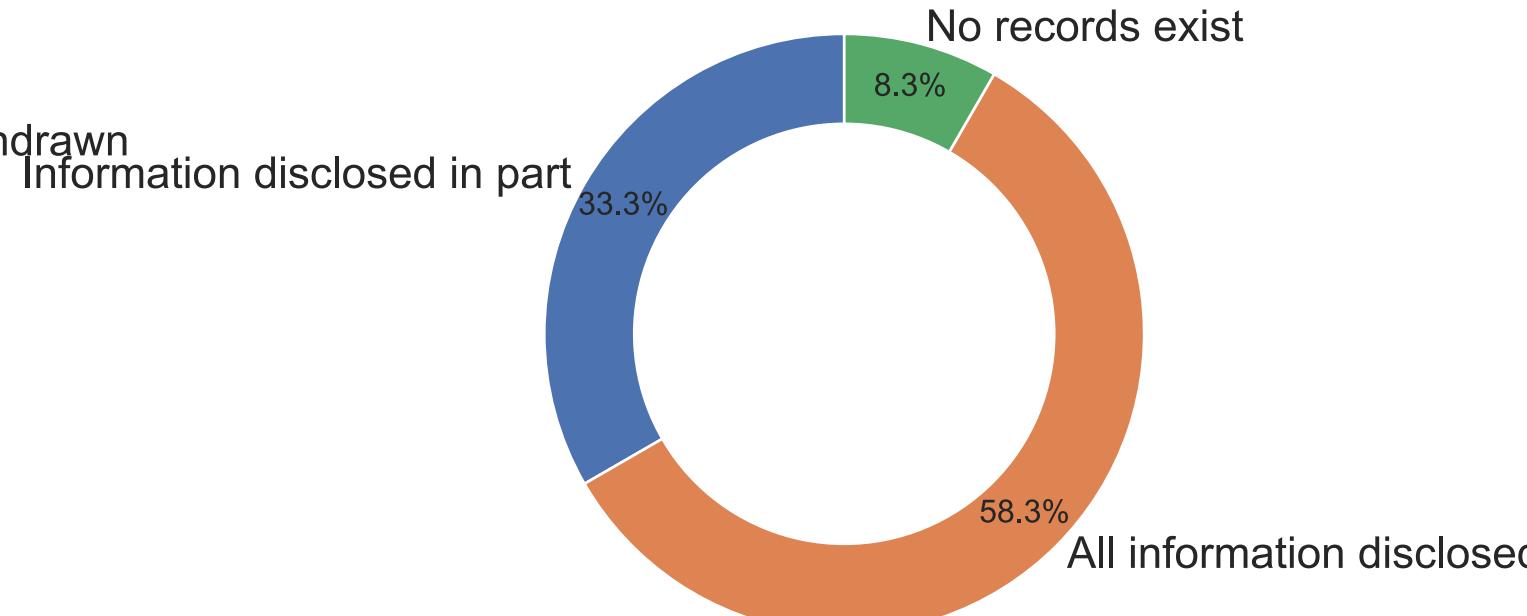


Decision percentage for each n-gram

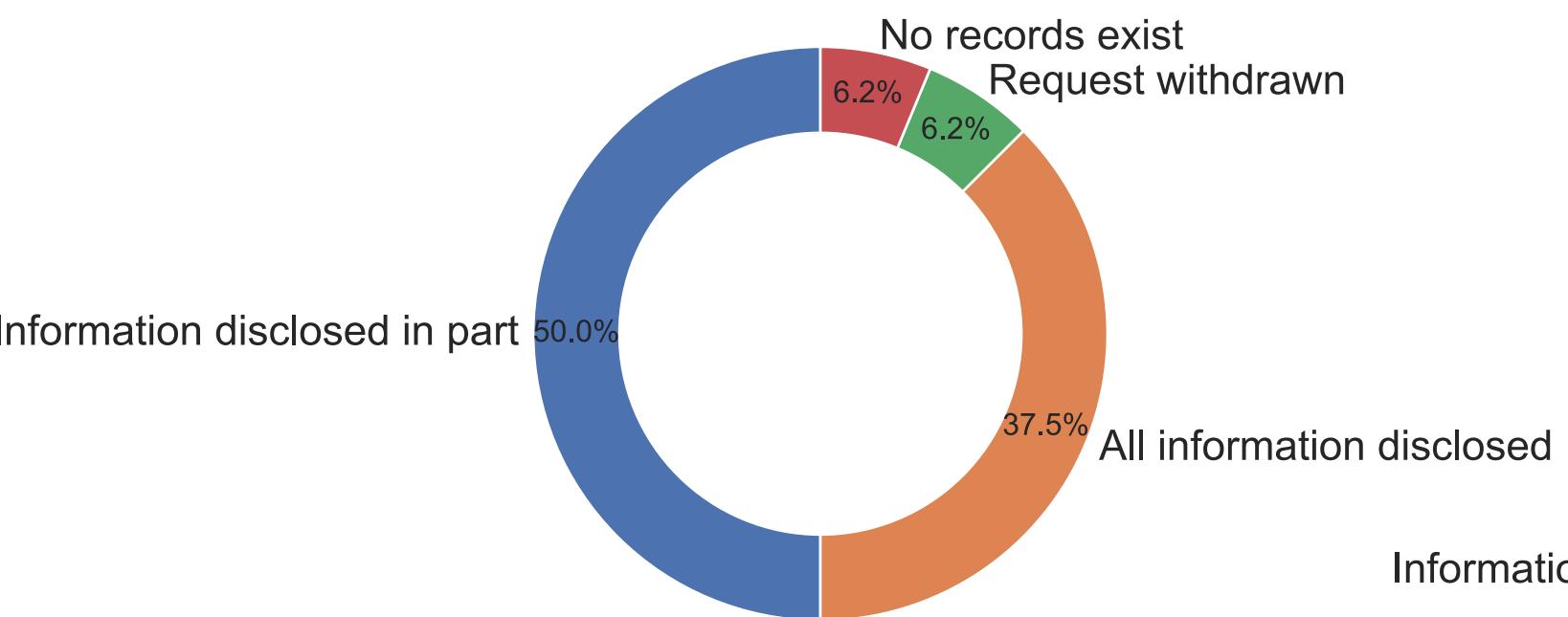
grand river transit



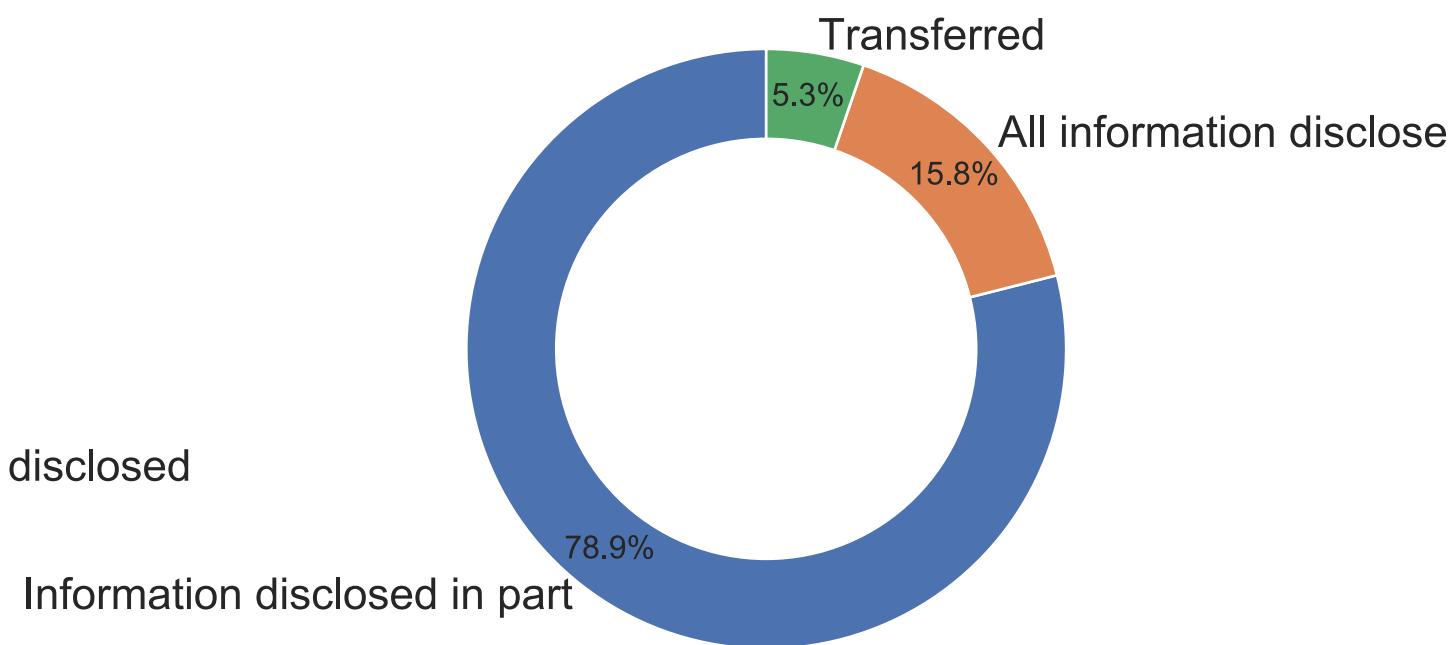
food bear illness



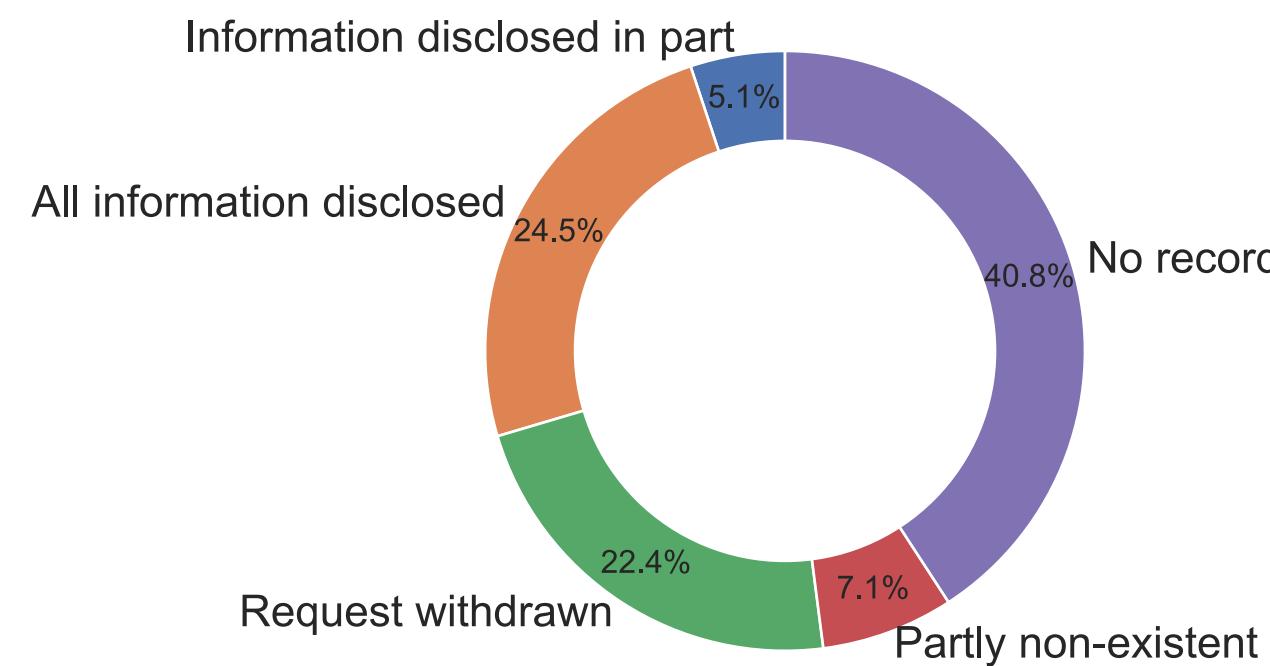
public health inspection



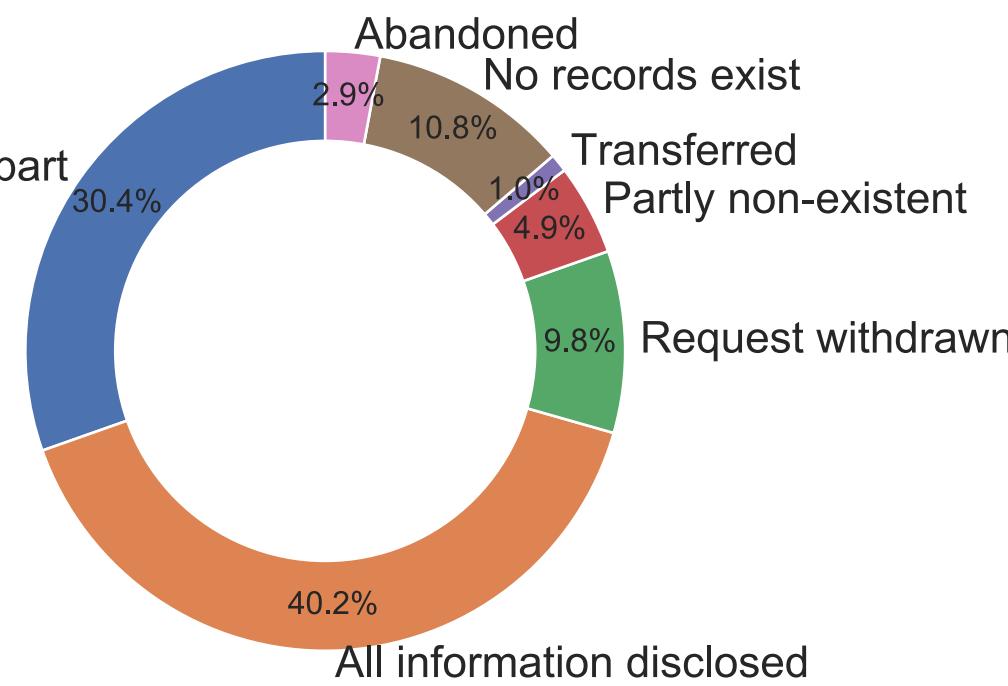
rabies control



environmental site

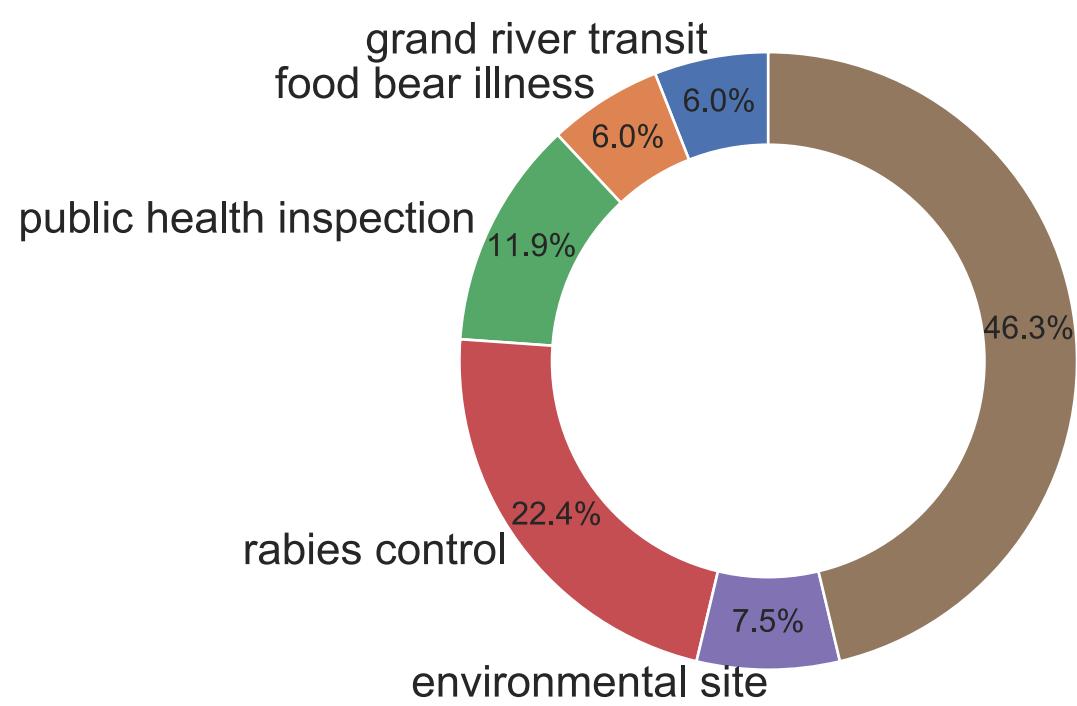


ontario works

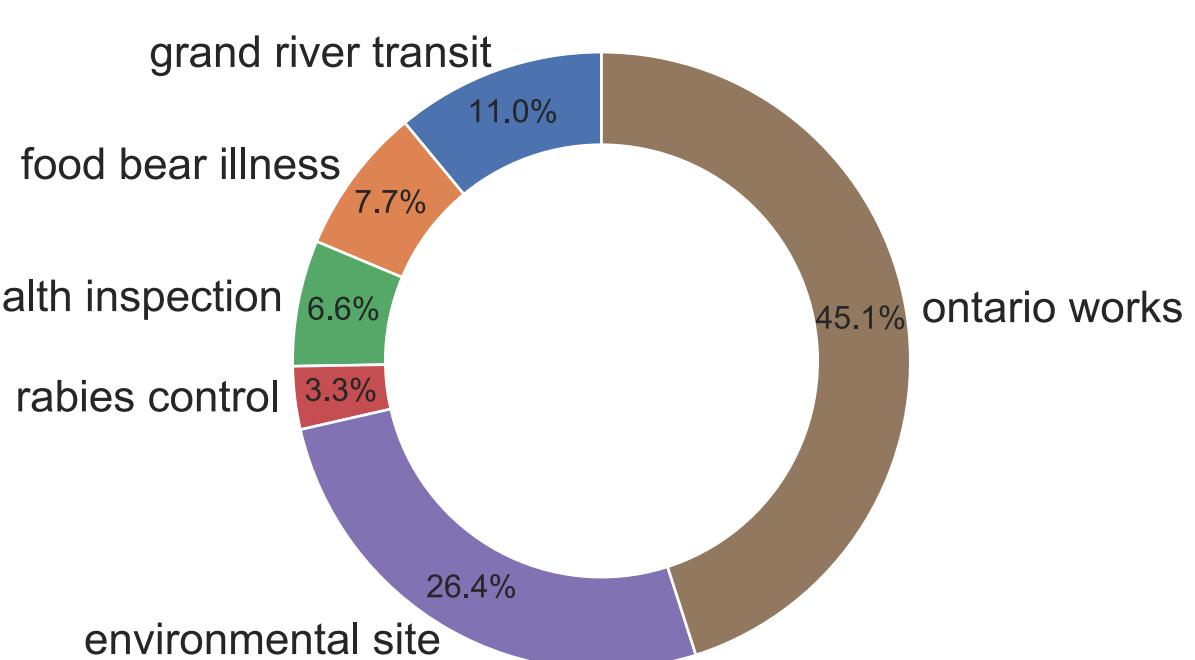


For requests with the n-grams, n-gram percentage based on decision

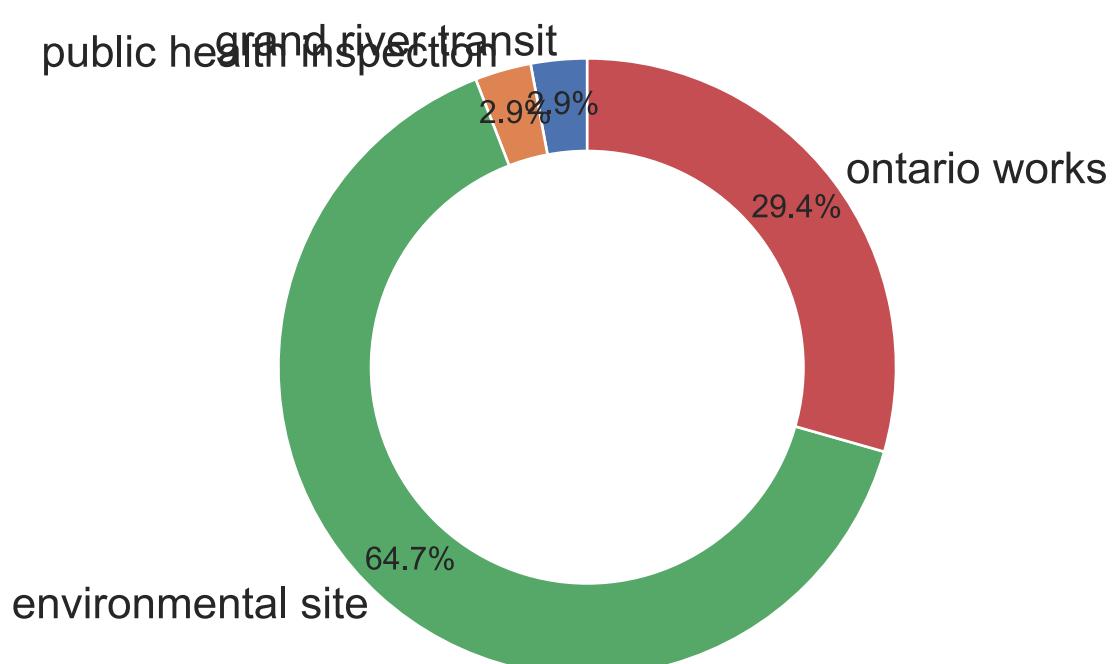
Information disclosed in part



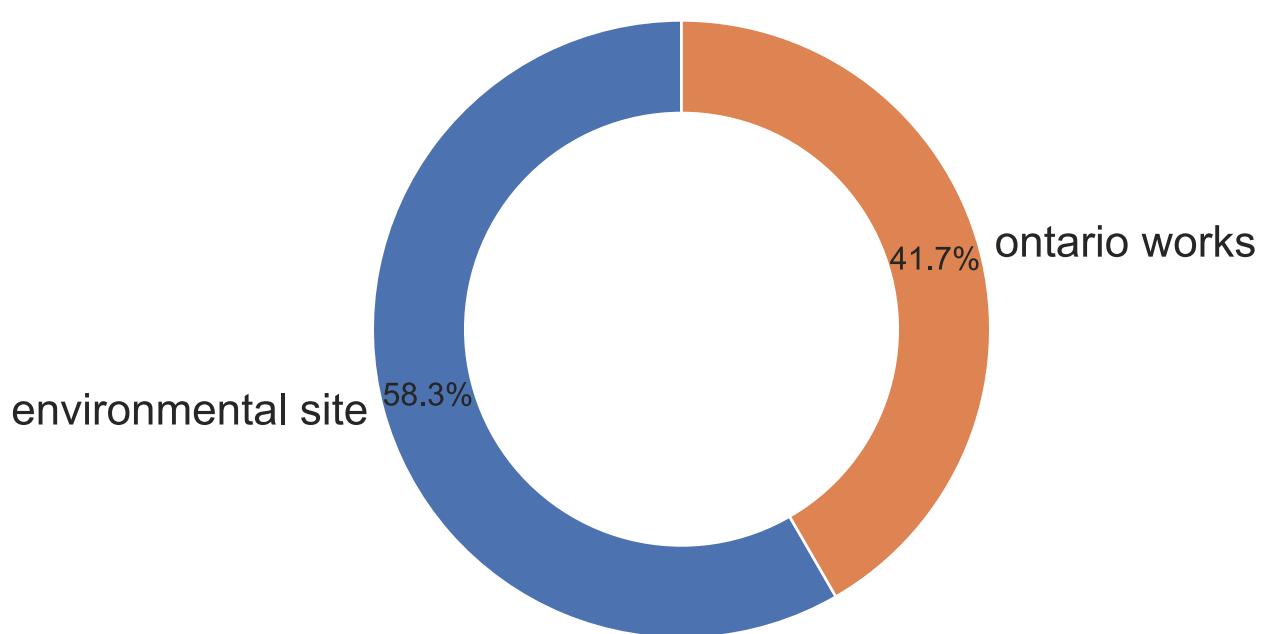
All information disclosed



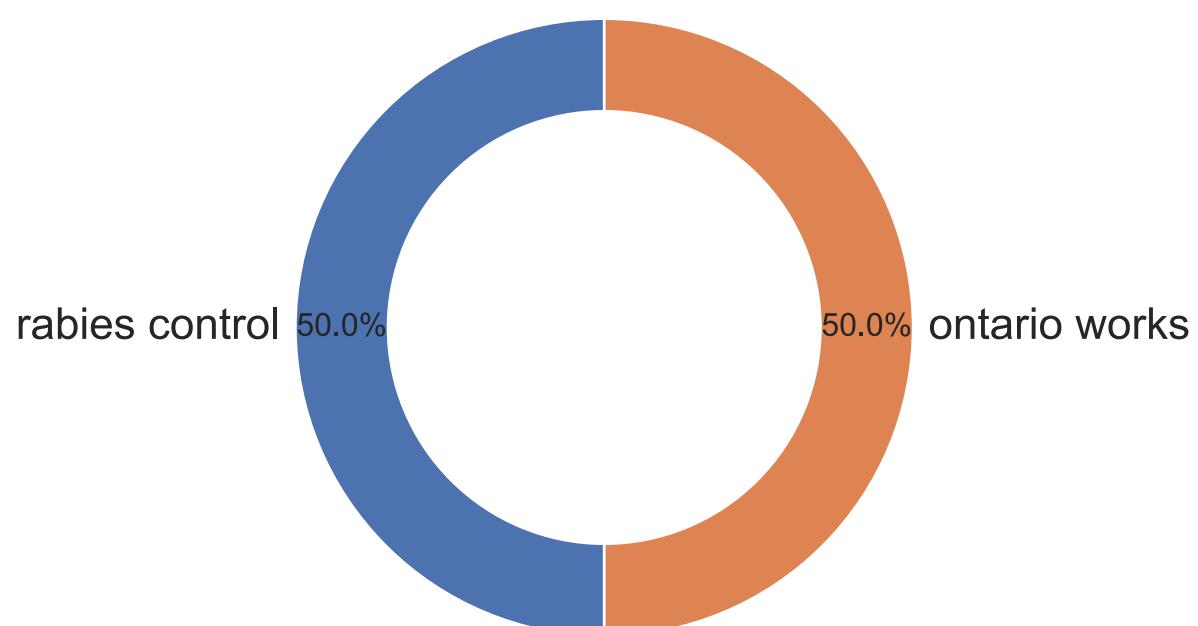
Request withdrawn



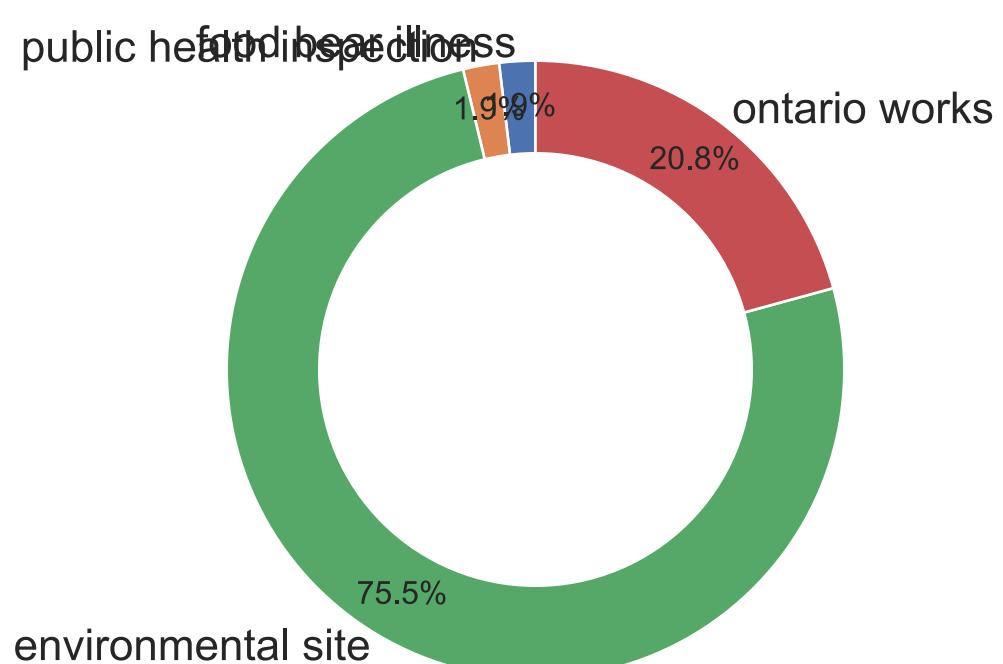
Partly non-existent



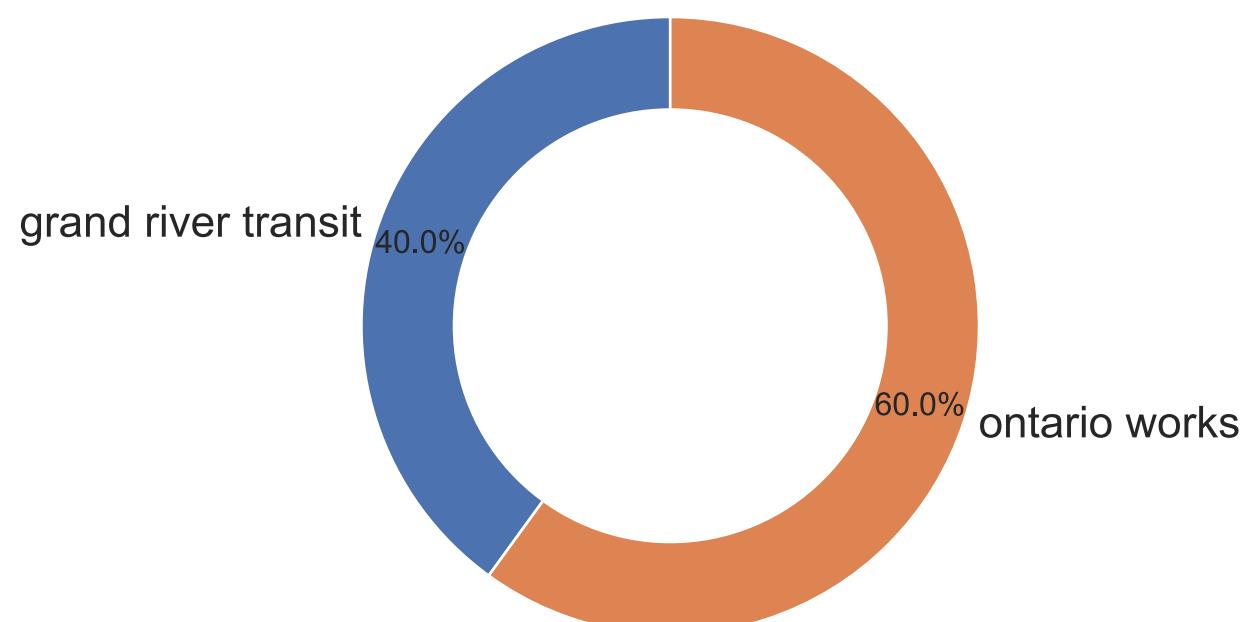
Transferred



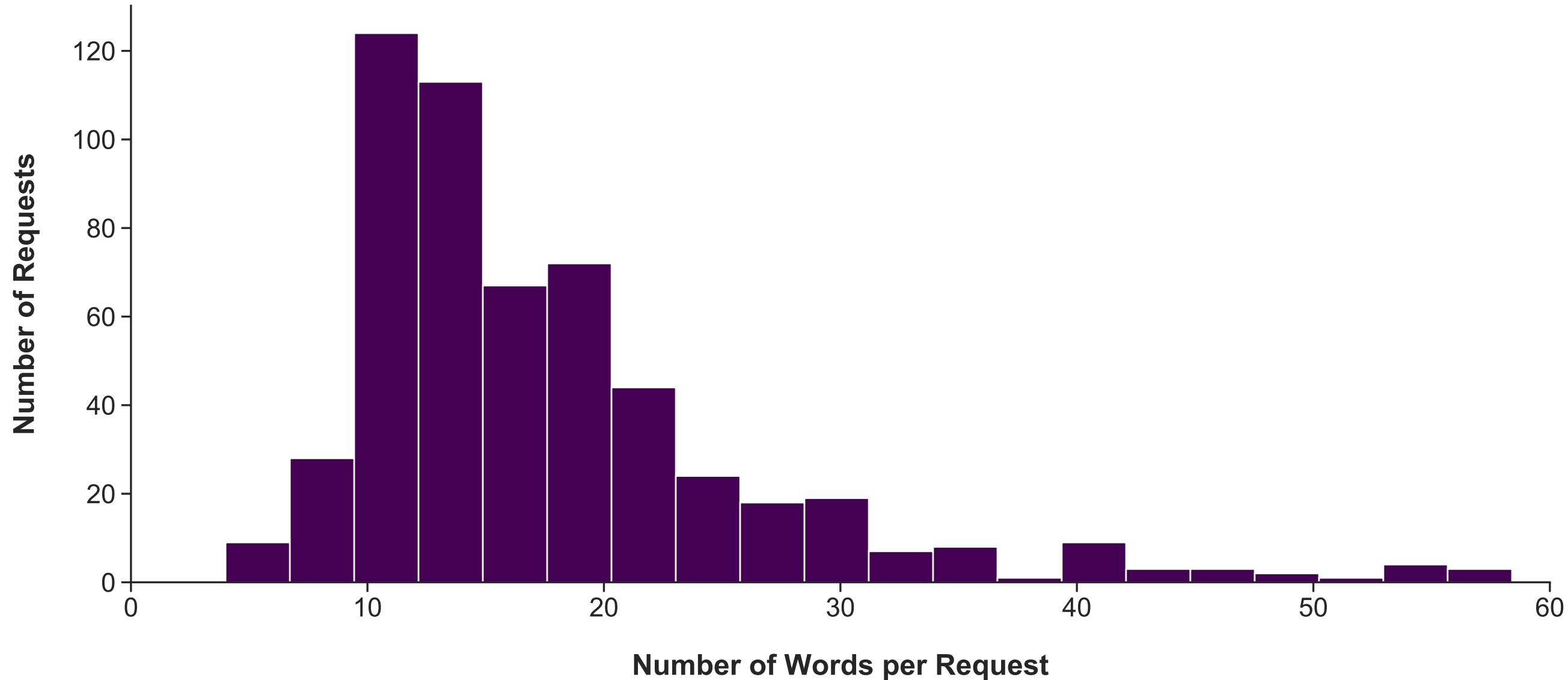
No records exist



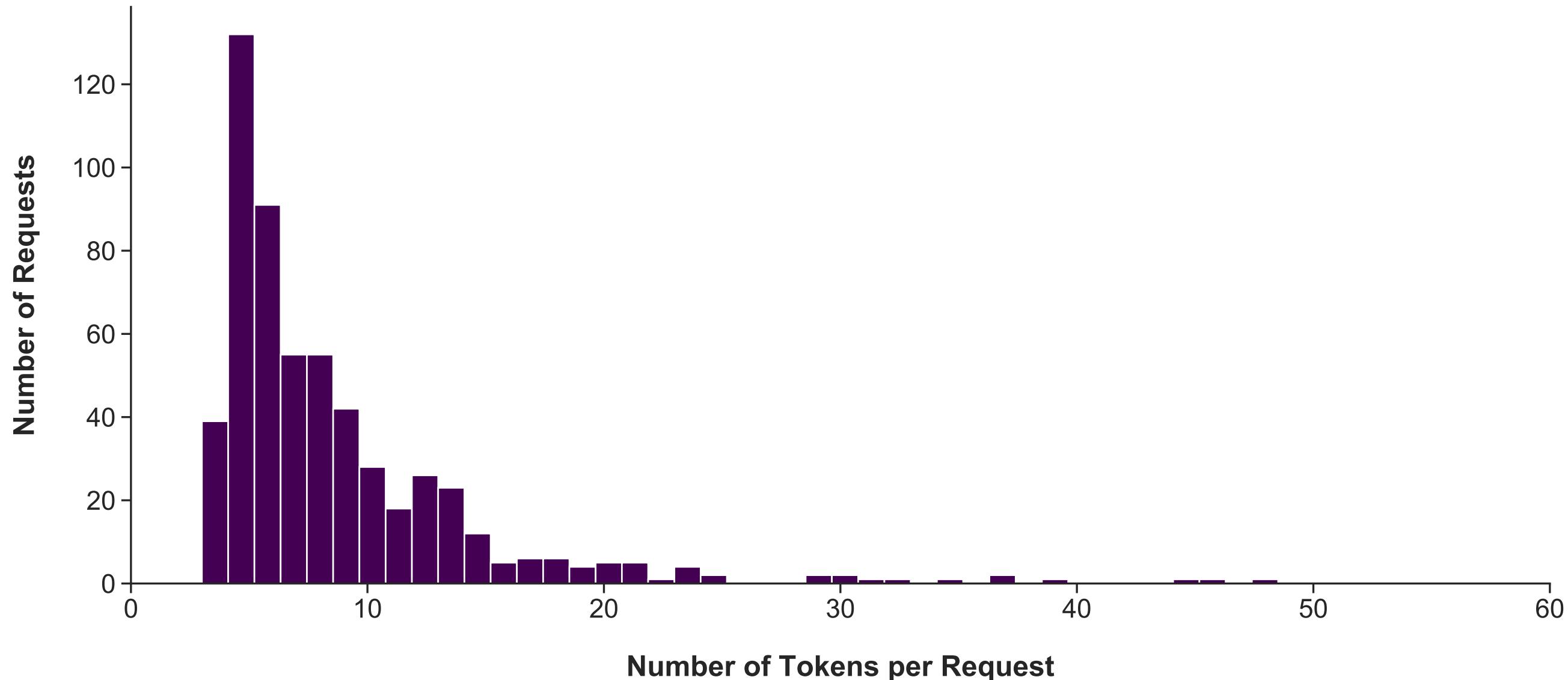
Abandoned



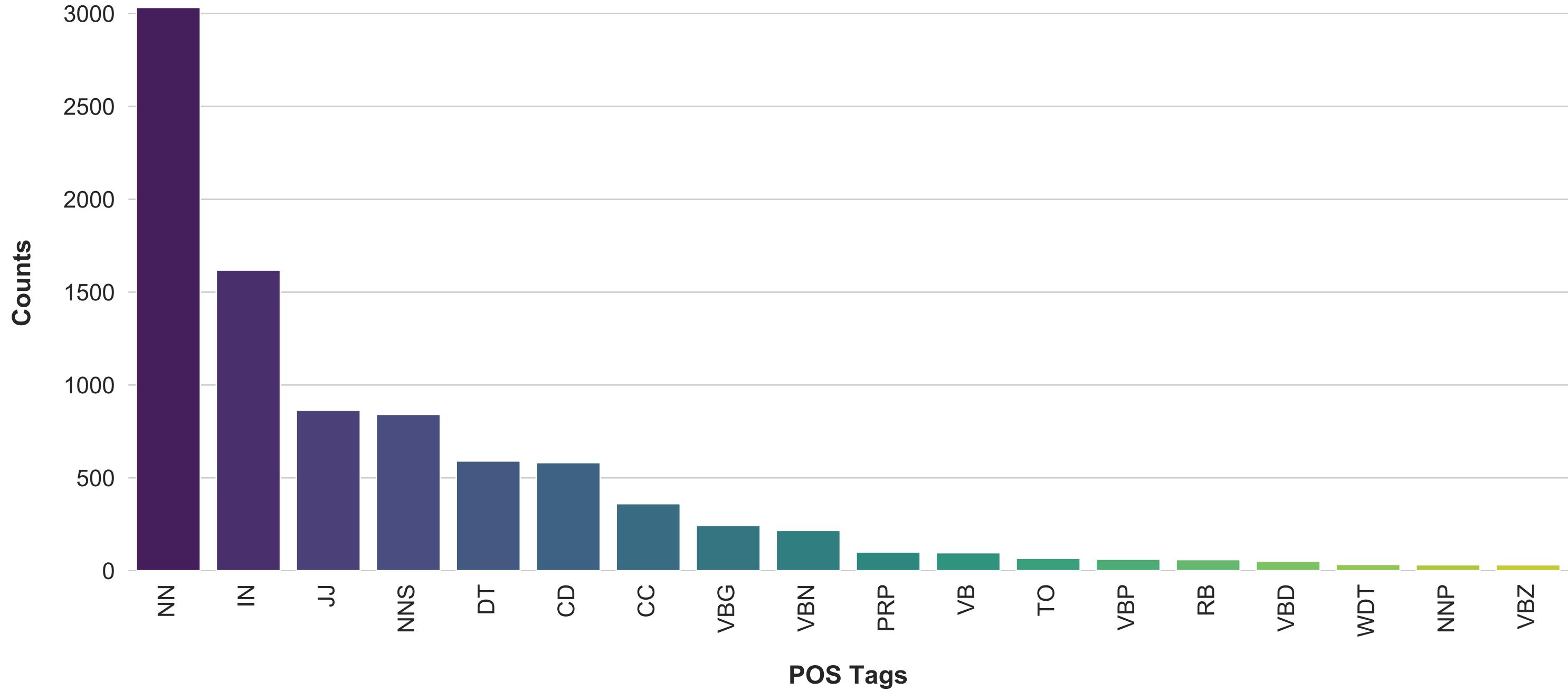
Average number of words per request is 20.5, while the median is 15.0



Average number of tokens per request is 9.3, while the median is 7.0

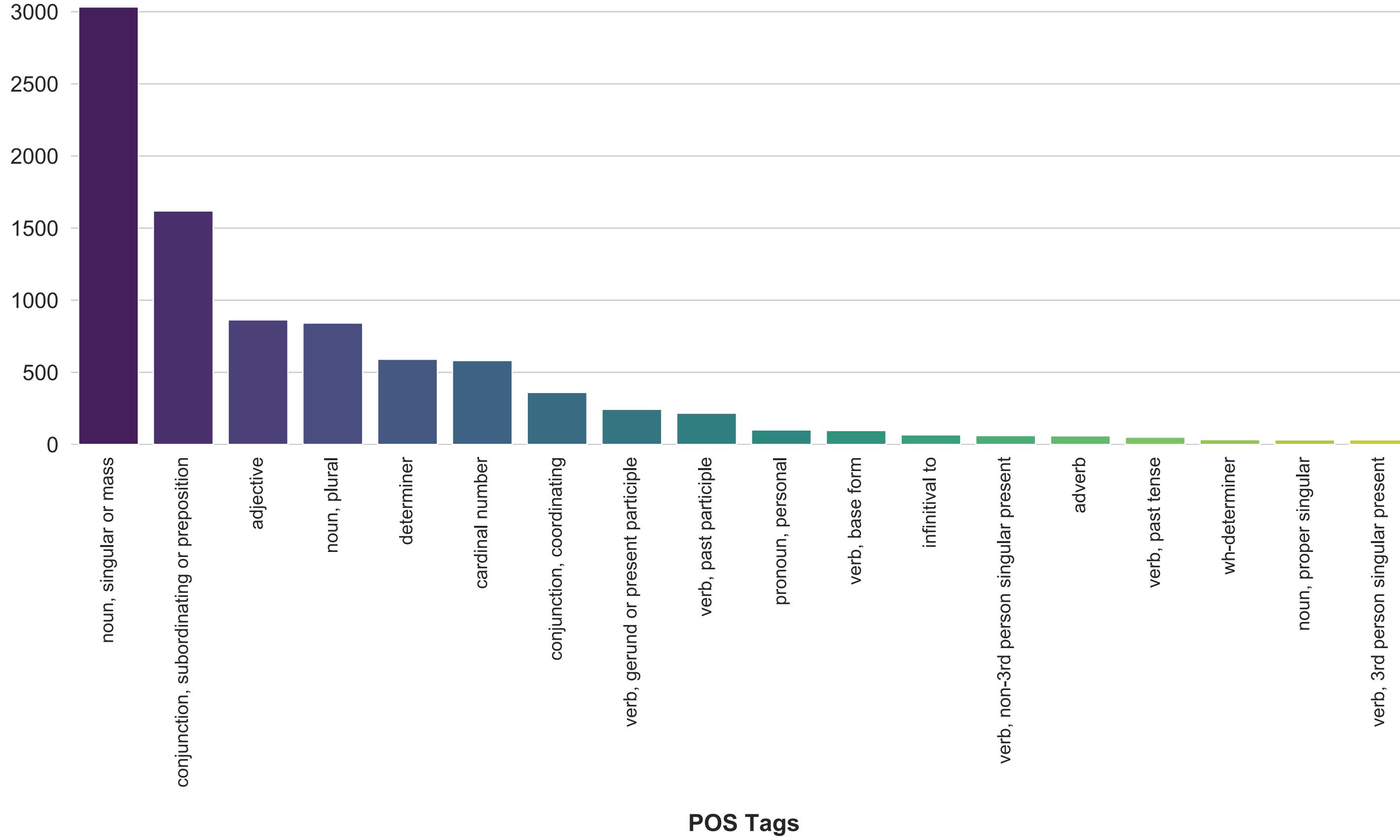


Full Tokenized Text

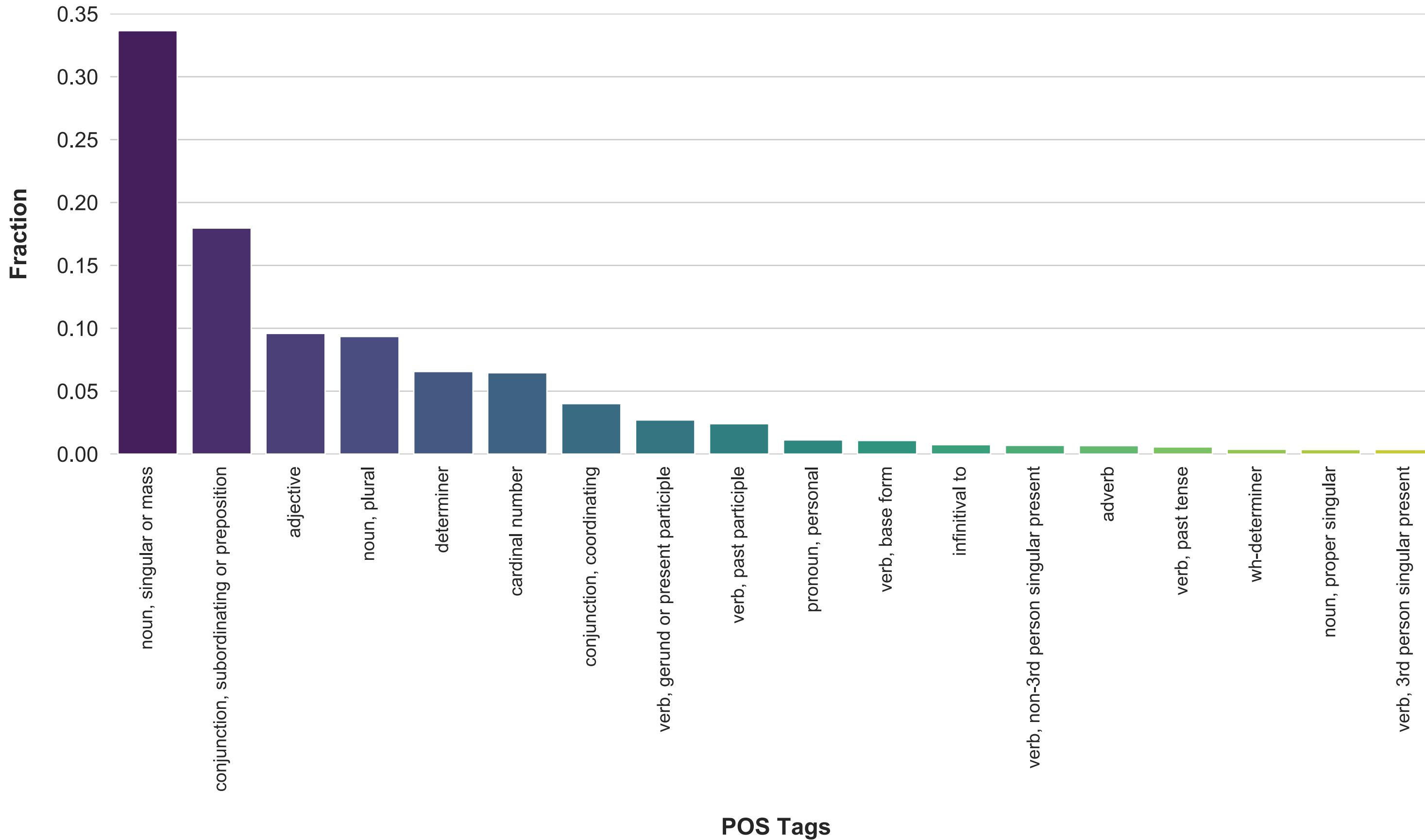


Full Tokenized Text

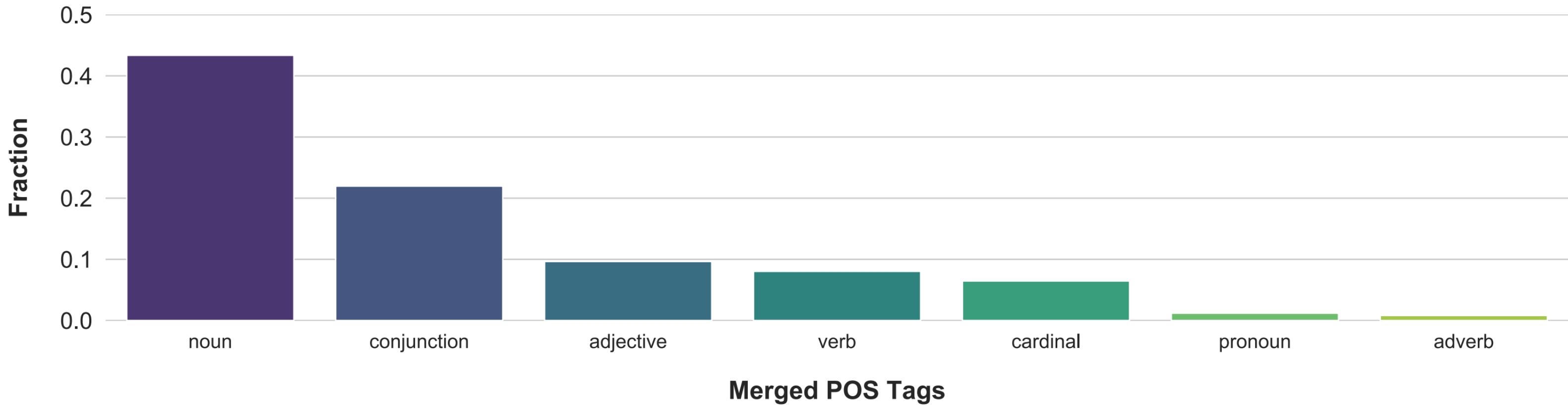
Counts



Full Tokenized Text



Full Tokenized Text



LDA Topic Counts - CountVectorizer

Number of Requests

125
100
75
50
25
0

regard, file, record, health
Topic 1:

waterloo, region, region
Topic 2:
waterloo, record

record, regard, relate, file
Topic 3:

relate, record, waterloo, region
Topic 4:

environmental, environmental site, assessment, phase
Topic 5:

include, terminal, guardrail, guardrail, terminal
Topic 6:

regard, record, waterloo, relate
Topic 7:

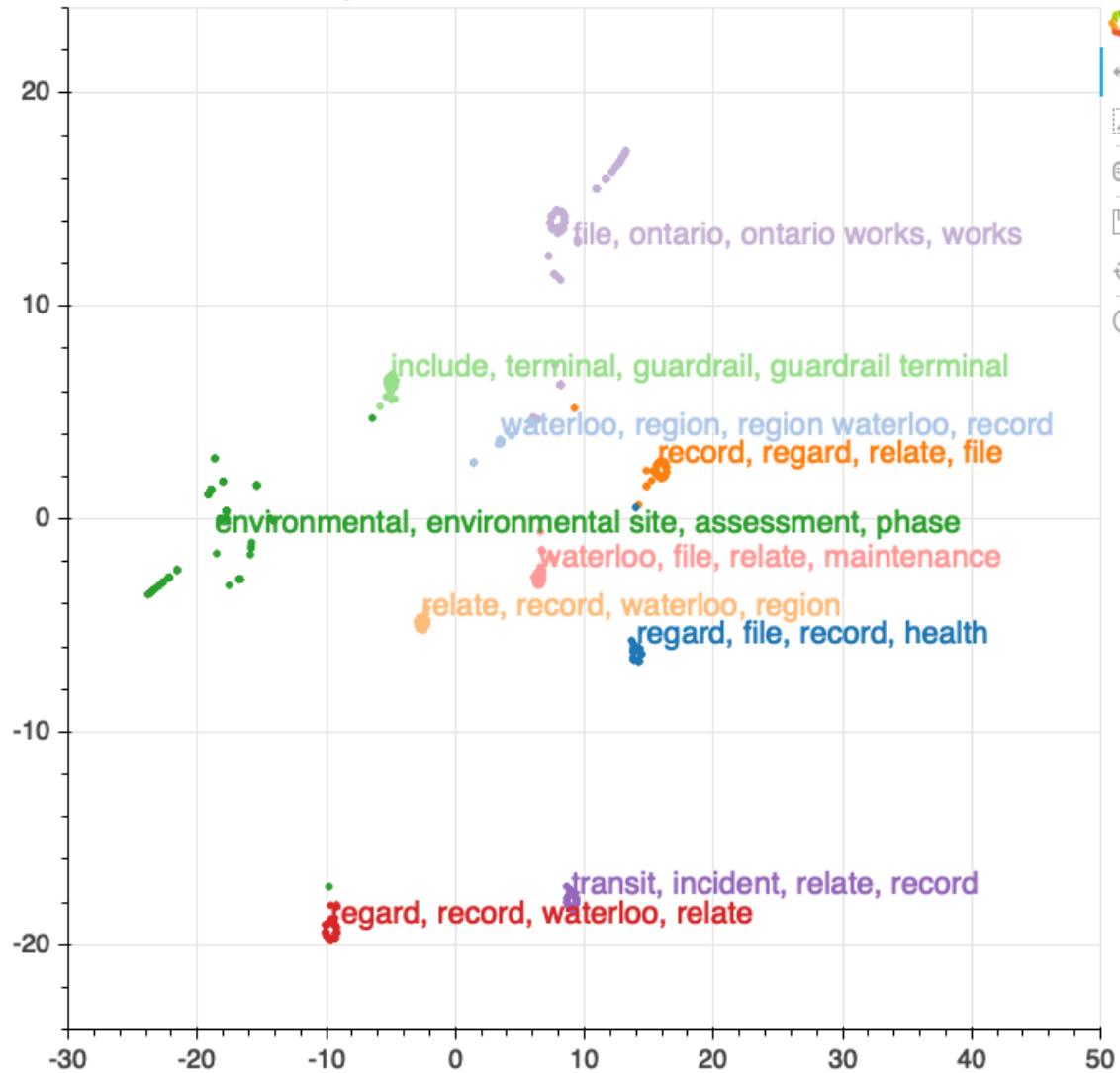
waterloo, file, relate, maintenance
Topic 8:

transit, incident, relate, record
Topic 9:

file, ontario, ontario works, works
Topic 10:

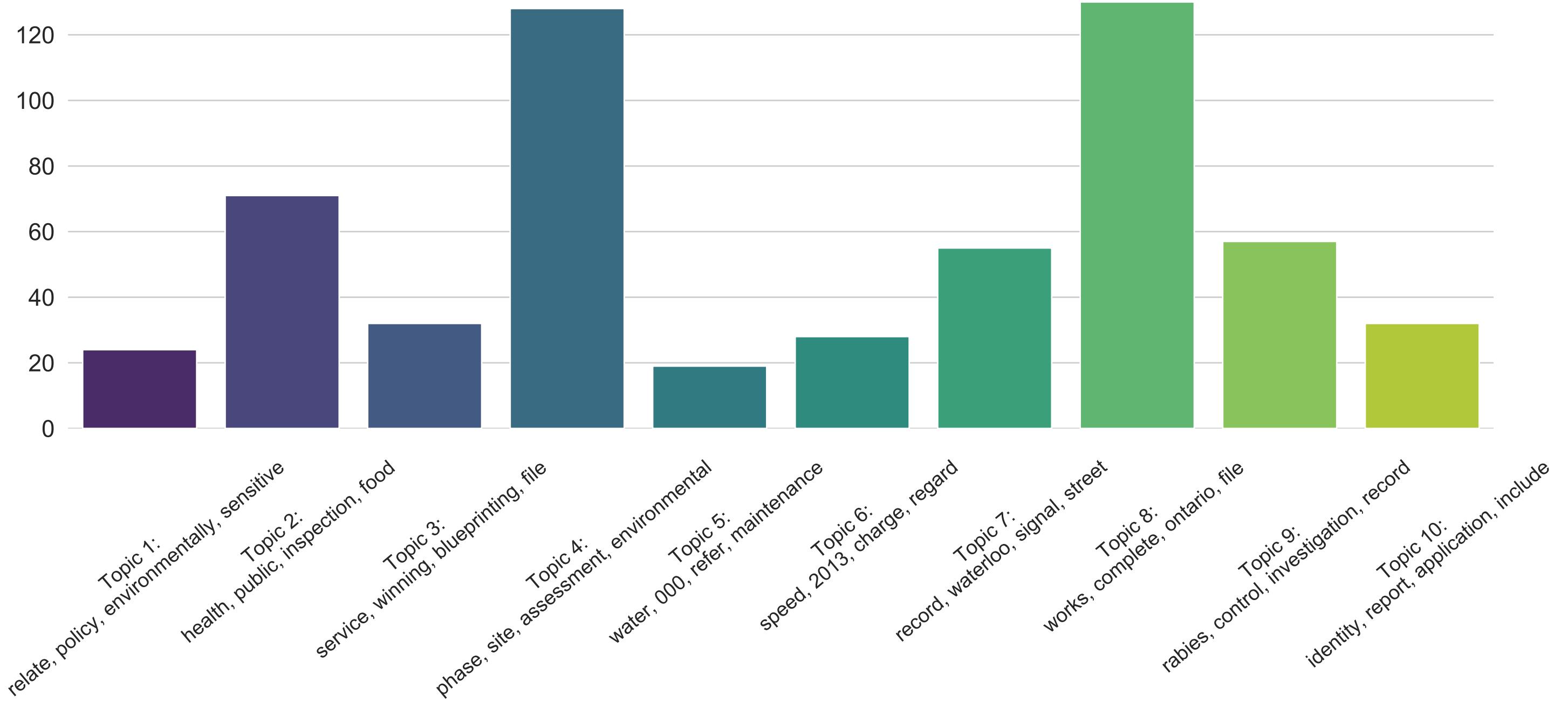


t-SNE Clustering of 10 LDA Topics - CountVectorizer

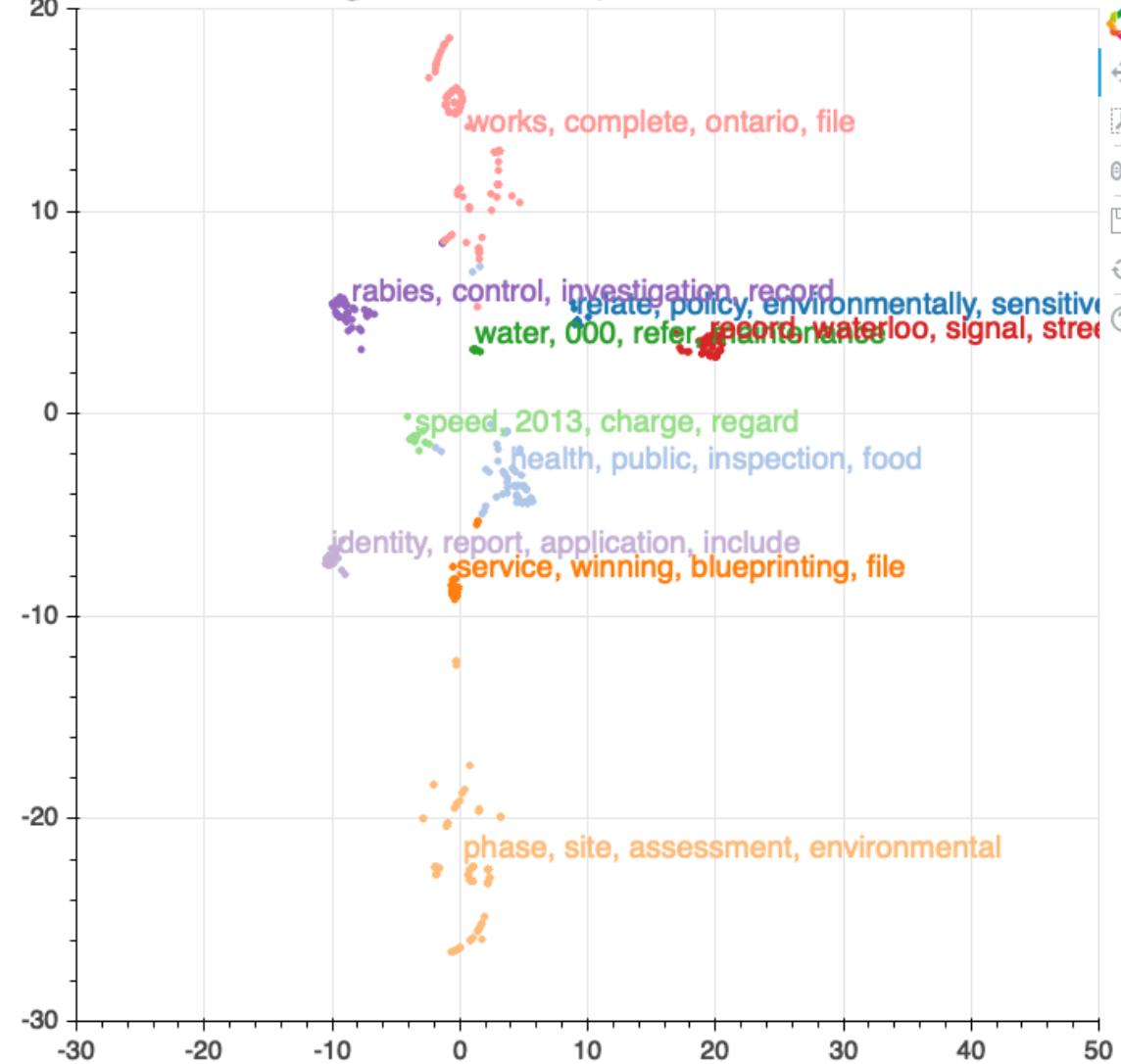


LDA Topic Counts - tf-idf Vectorizer

Number of Requests



t-SNE Clustering of 10 LDA Topics - tf-idf Vectorizer



LSA Topic Counts - CountVectorizer

Number of Requests

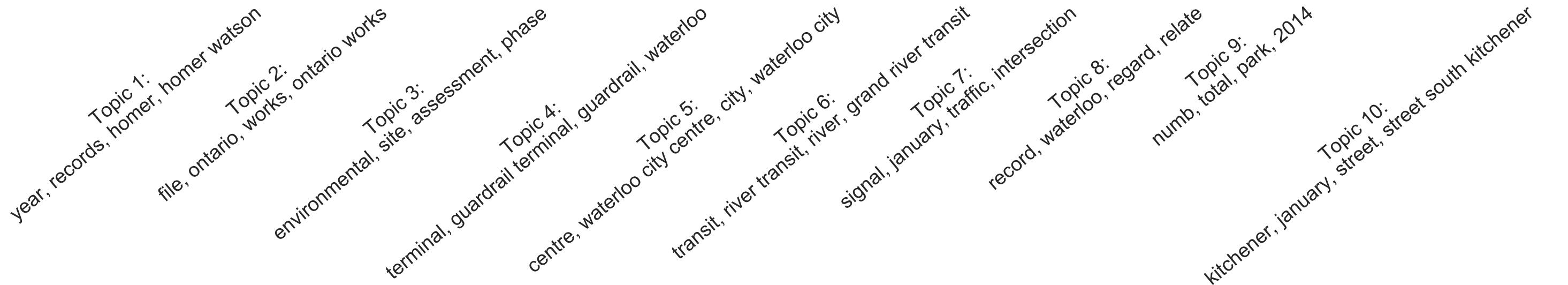
200

150

100

50

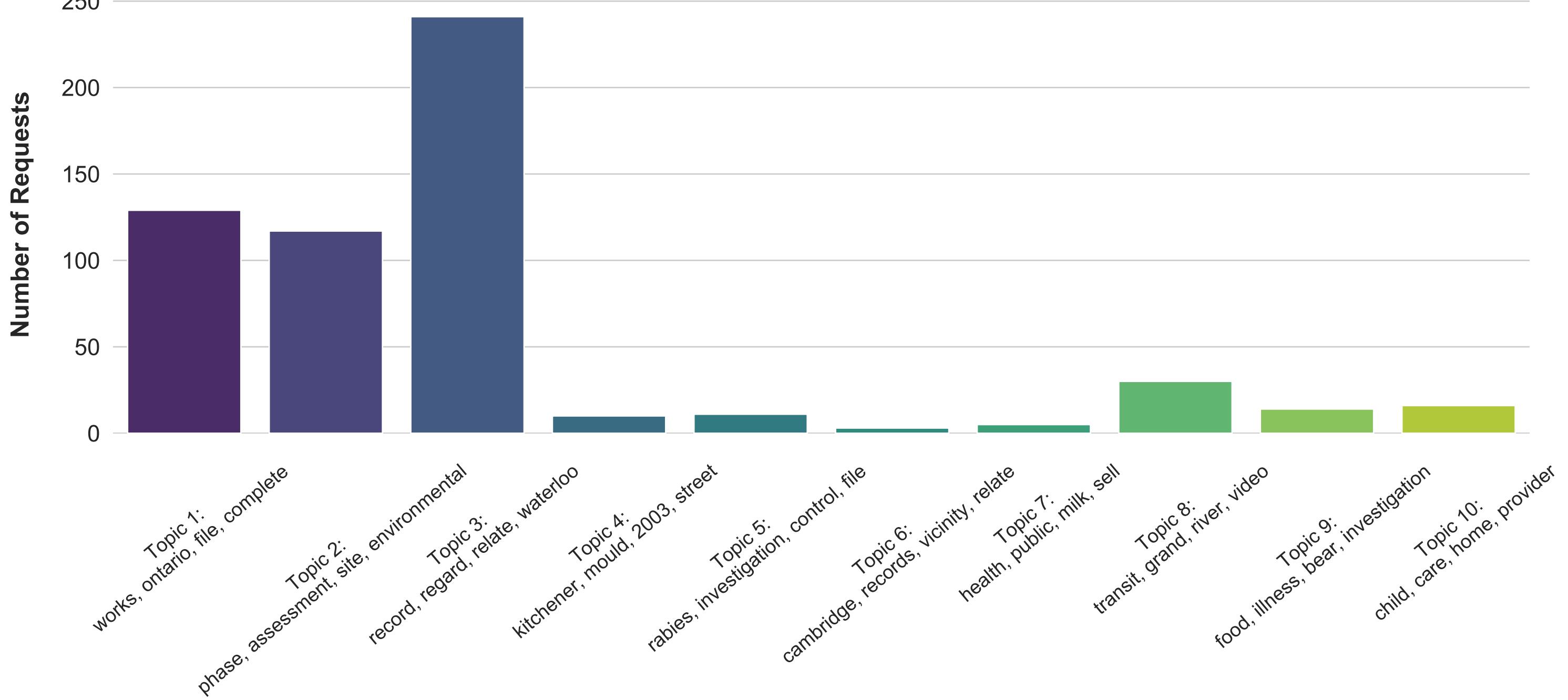
0



t-SNE Clustering of 10 LSA Topics - CountVectorizer



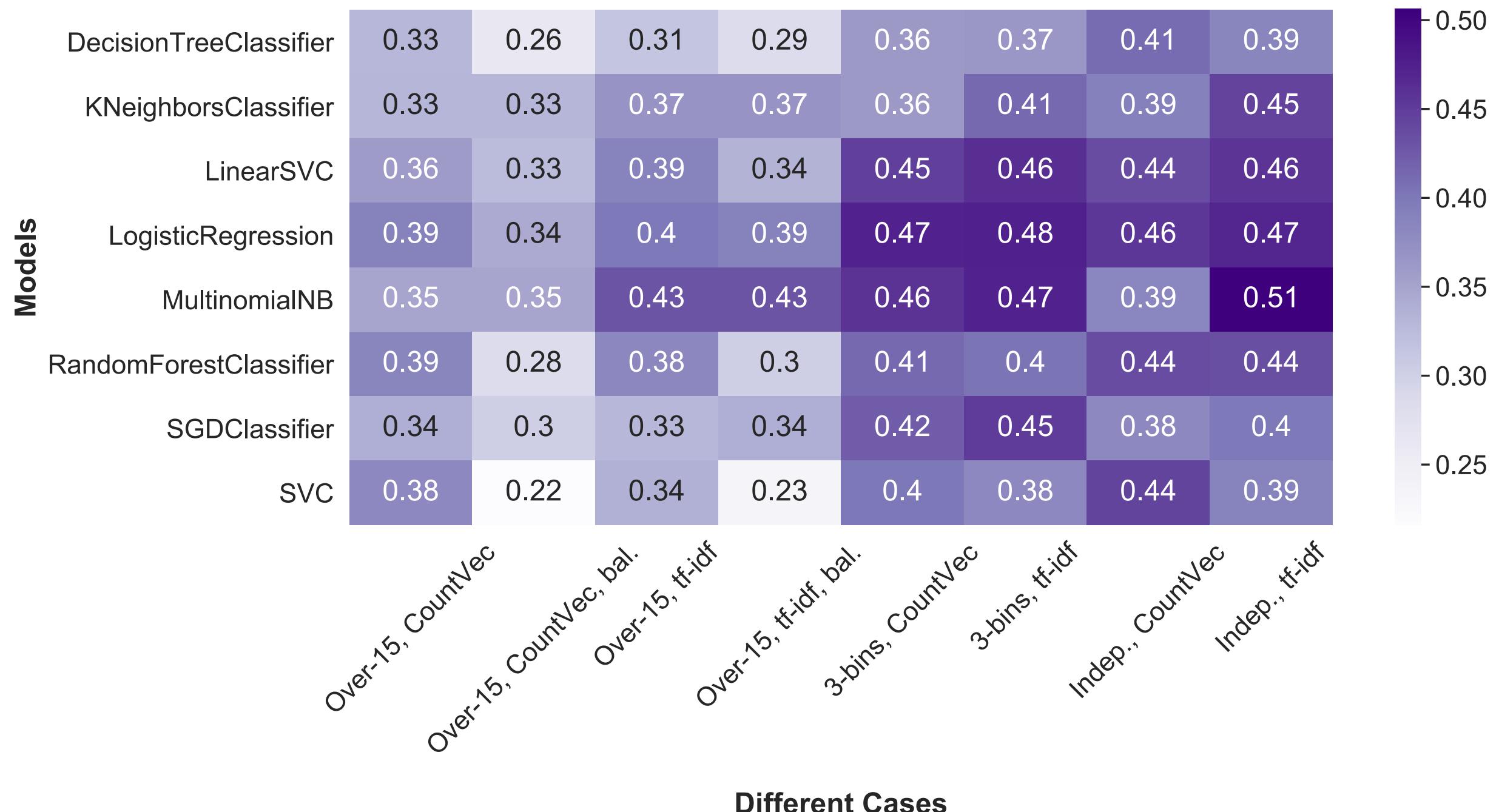
LSA Topic Counts - tf-idf Vectorizer



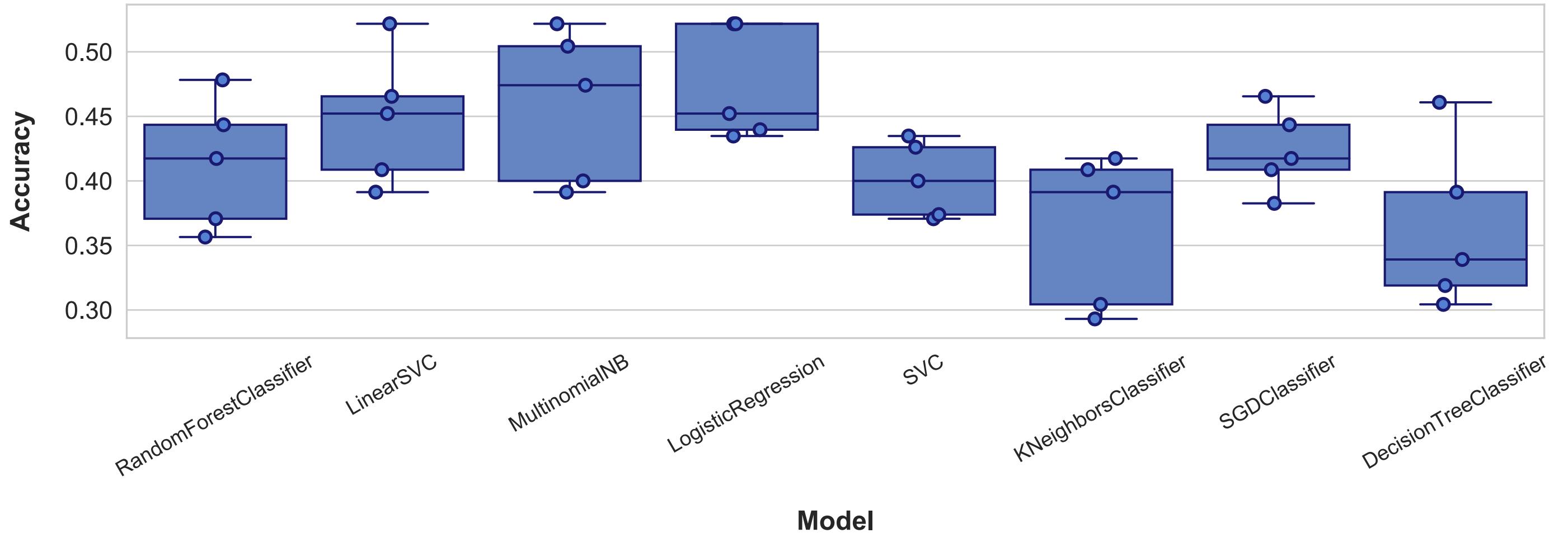
t-SNE Clustering of 10 LSA Topics - tf-idf Vectorizer



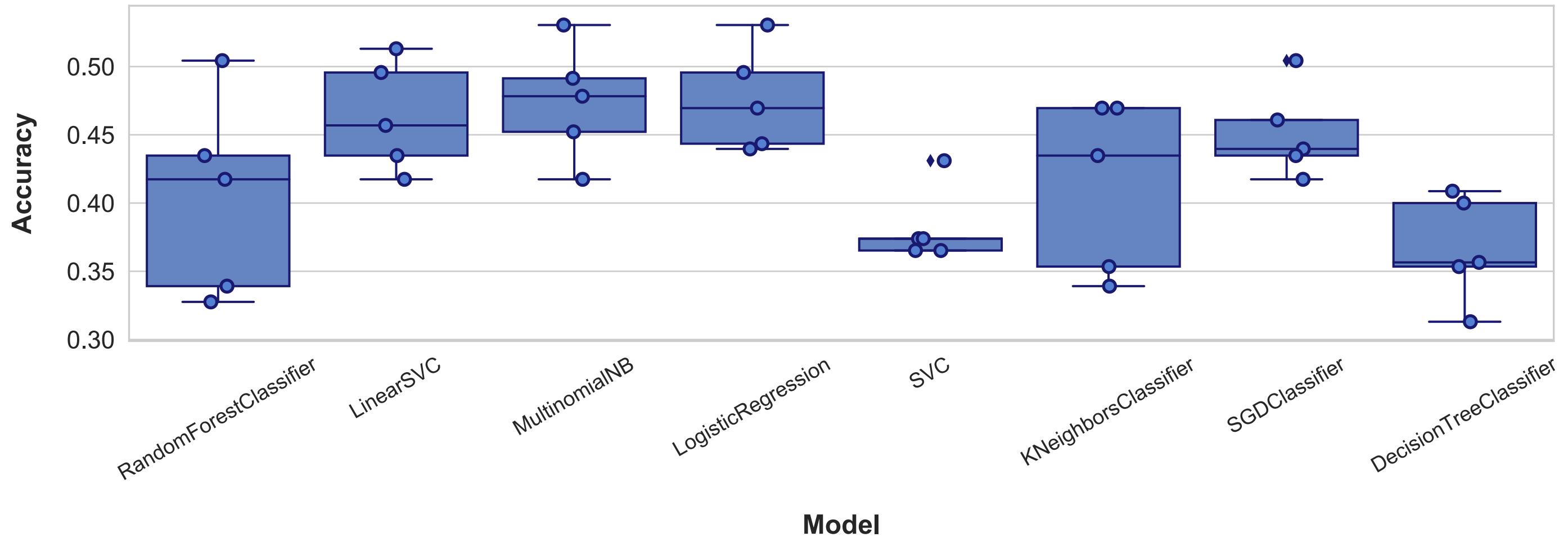
ML Model Accuracy



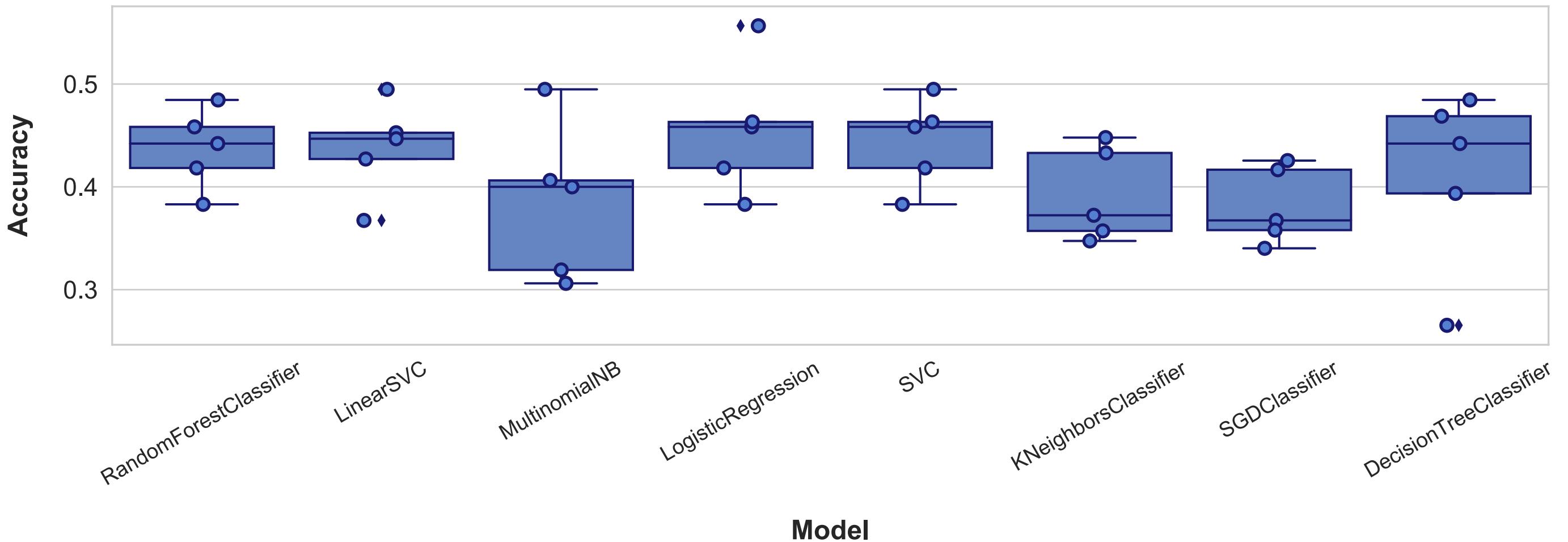
Classifier comparison for the 3-bin case, using CountVectorizer



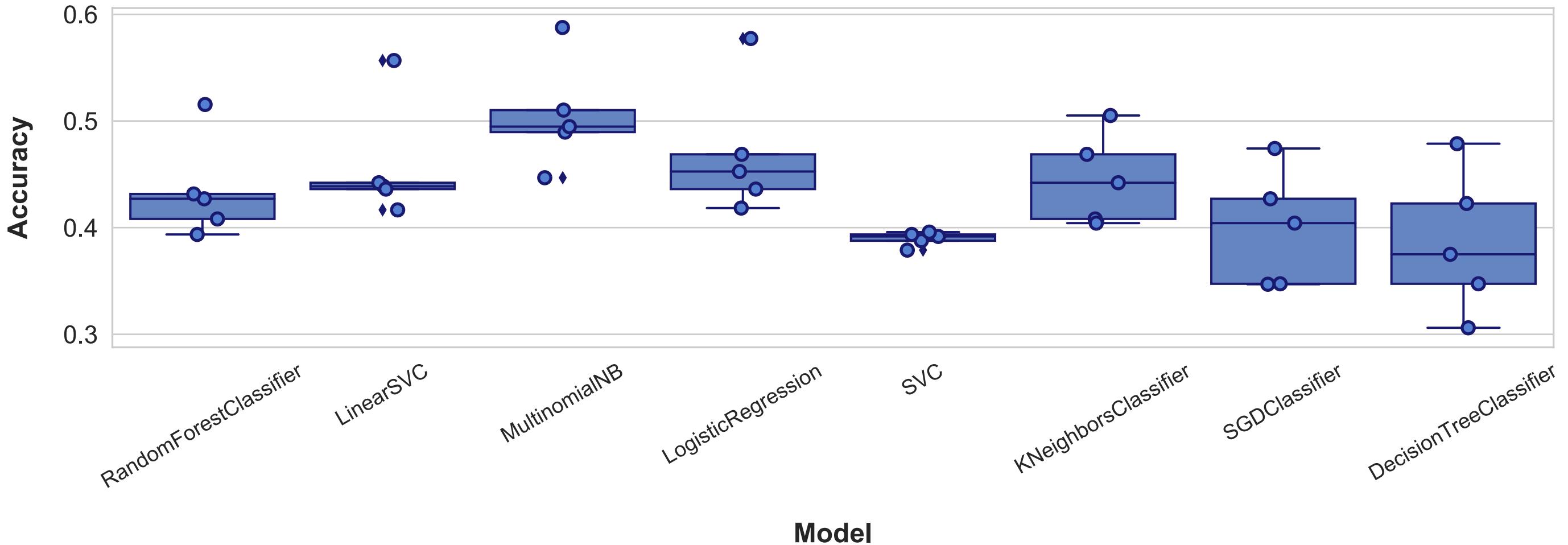
Classifier comparison for the 3-bin case, using tf-idf



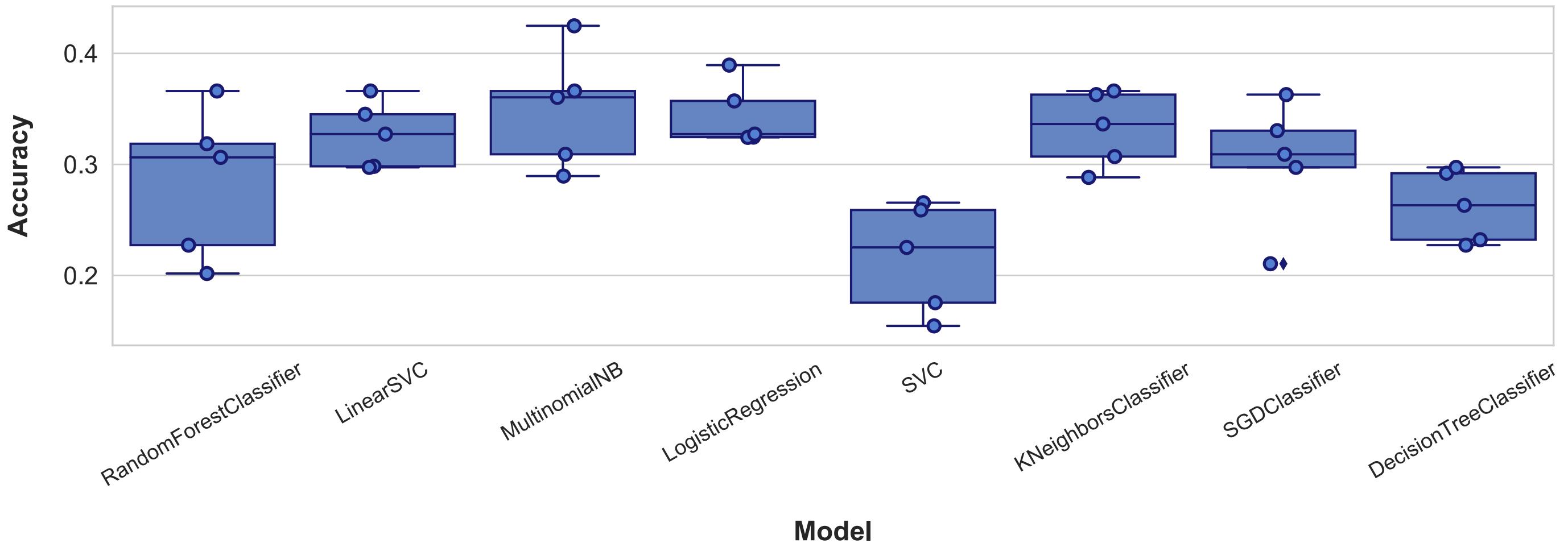
Classifier comparison for the indep. case, using CountVectorizer



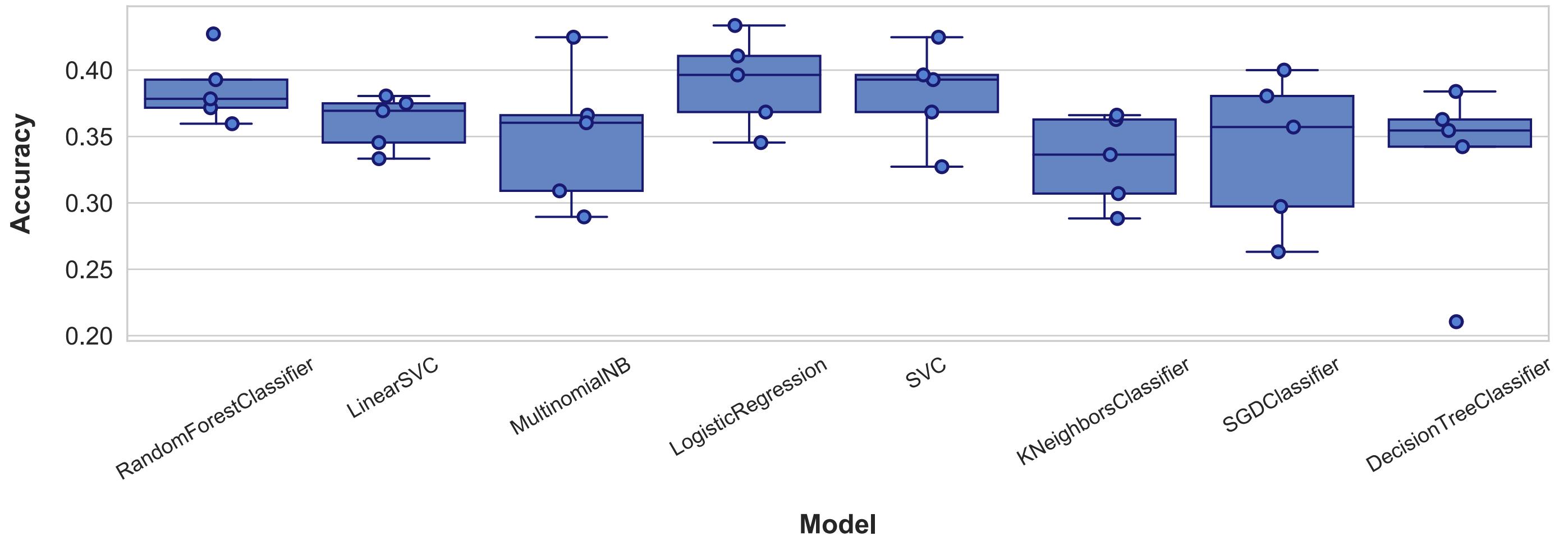
Classifier comparison for the indep. case, using tf-idf



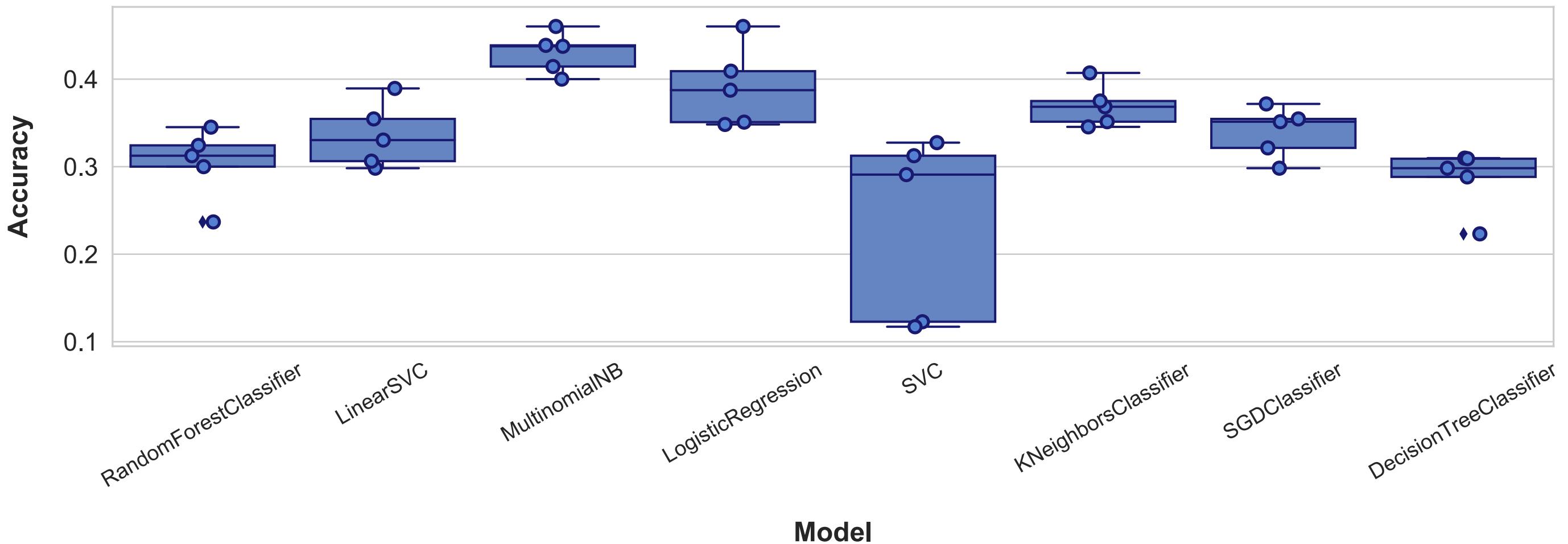
Classifier comparison for the over 15 case, using CountVectorizer, Balanced



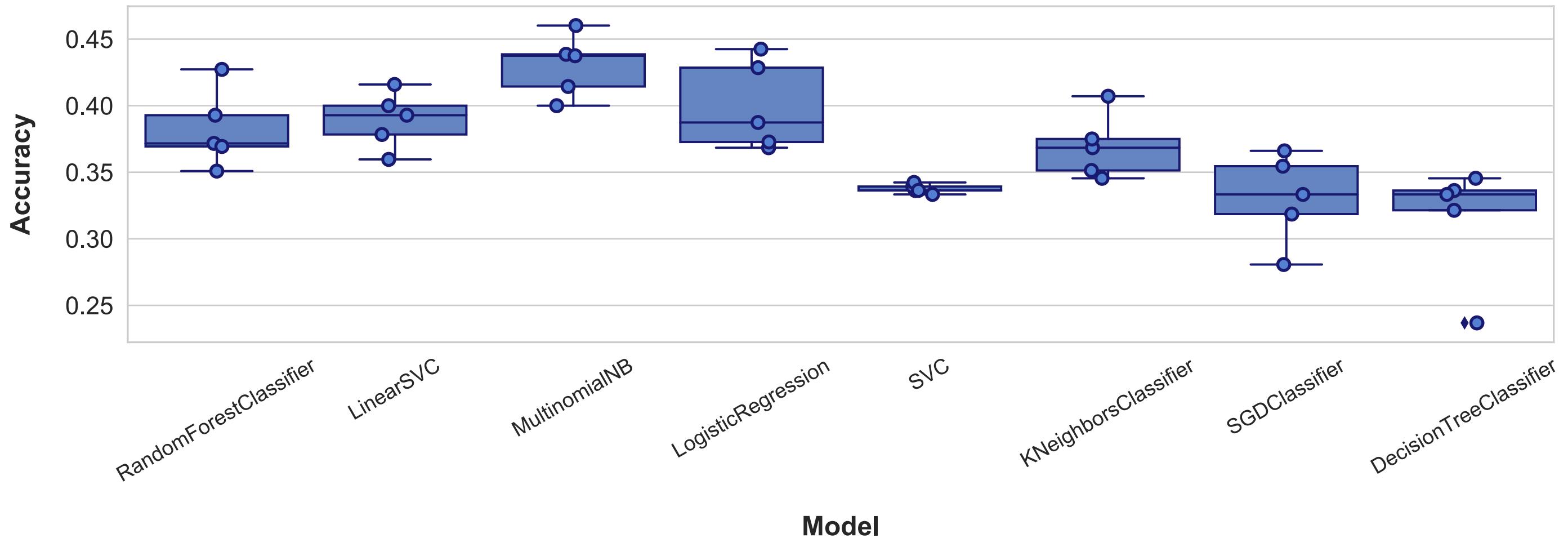
Classifier comparison for the over 15 case, using CountVectorizer



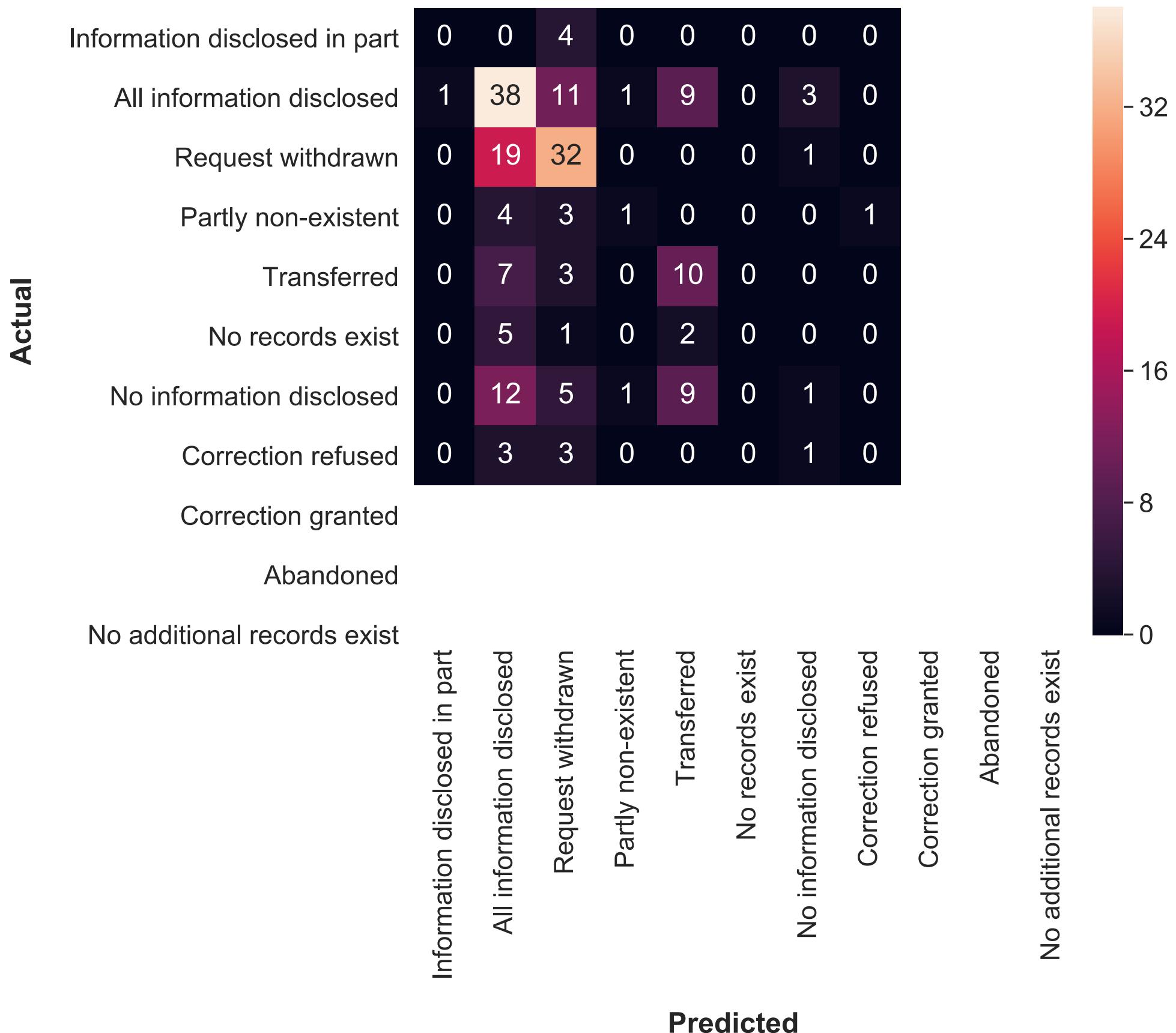
Classifier comparison for the over 15 case, using tf-idf, balanced



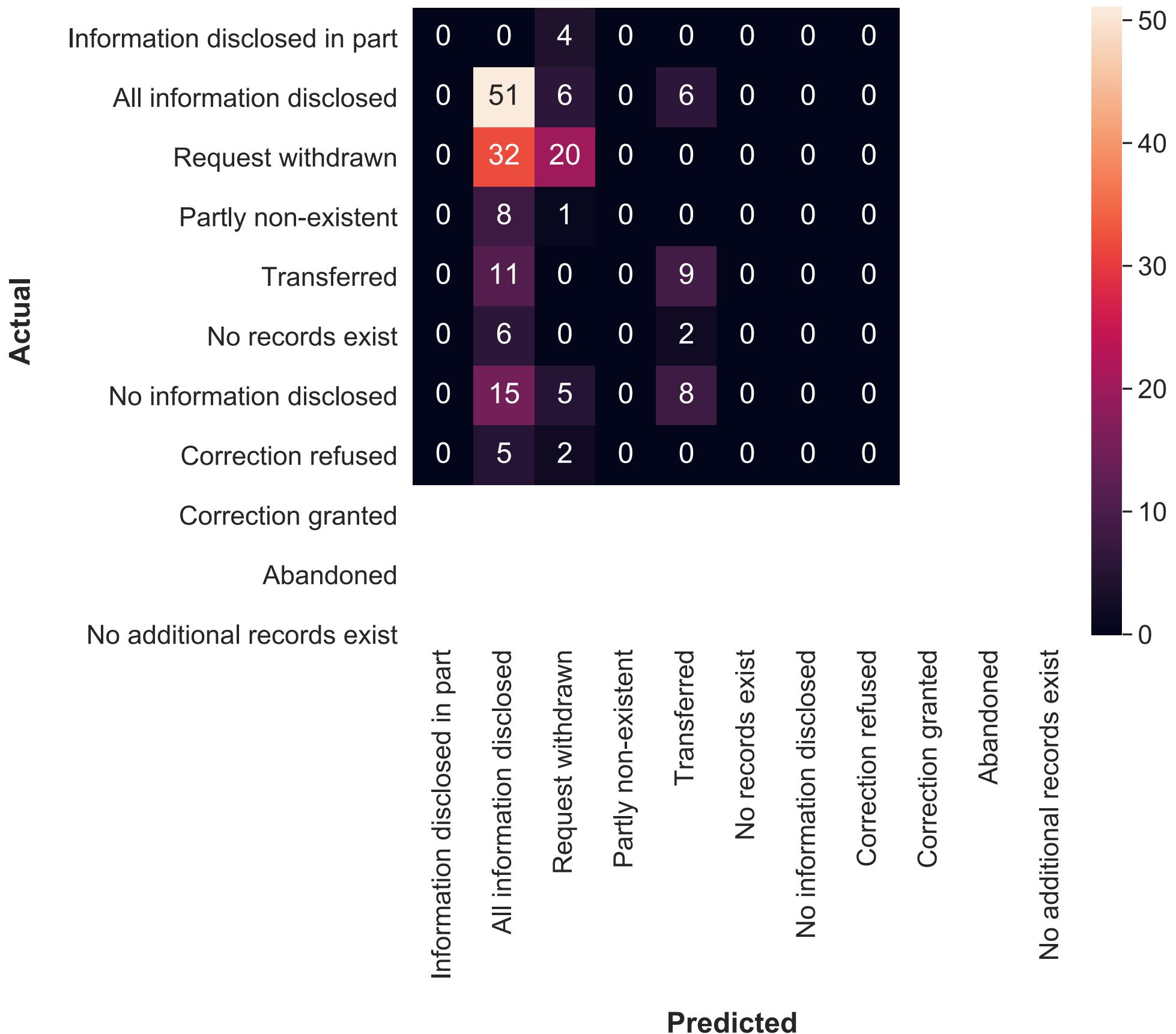
Classifier comparison for the over 15 case, using tf-idf



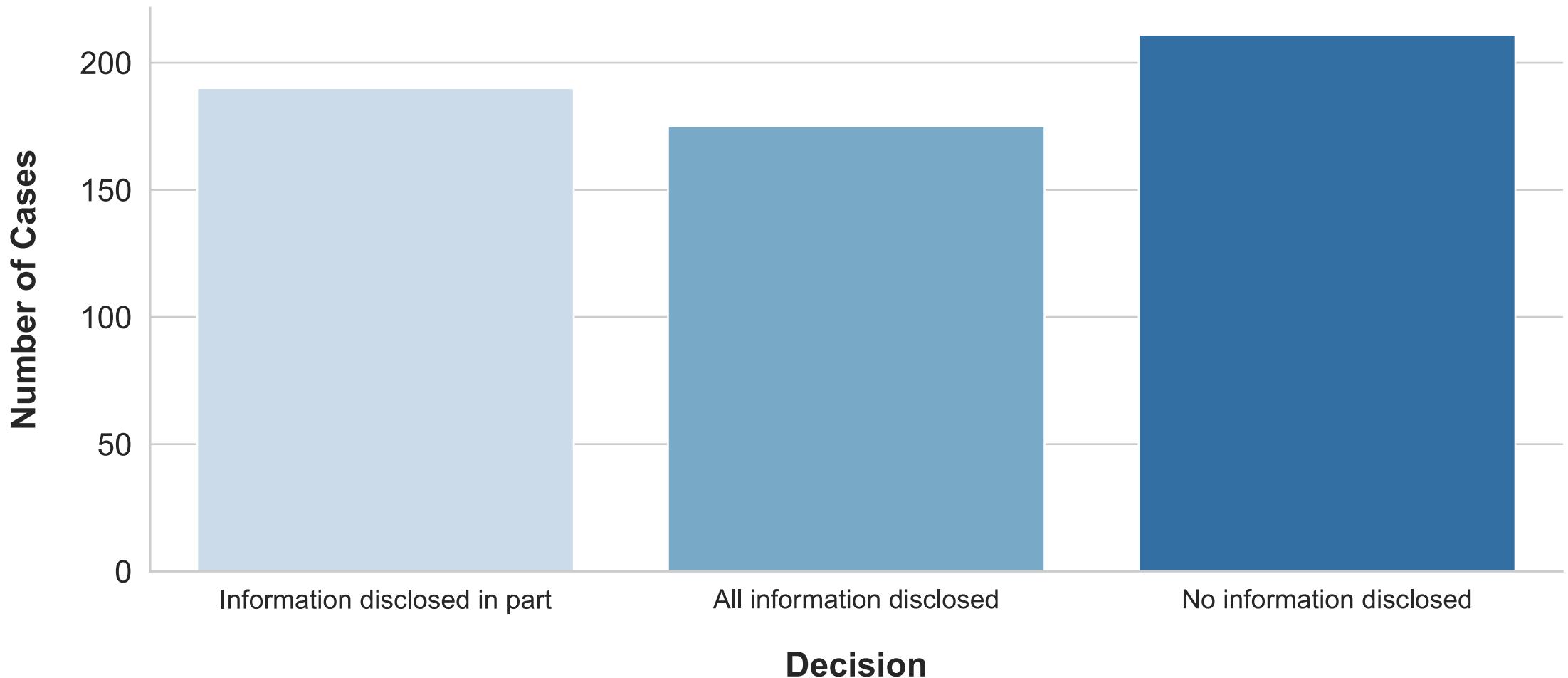
MultinomialNB, CountVectorizer, full set



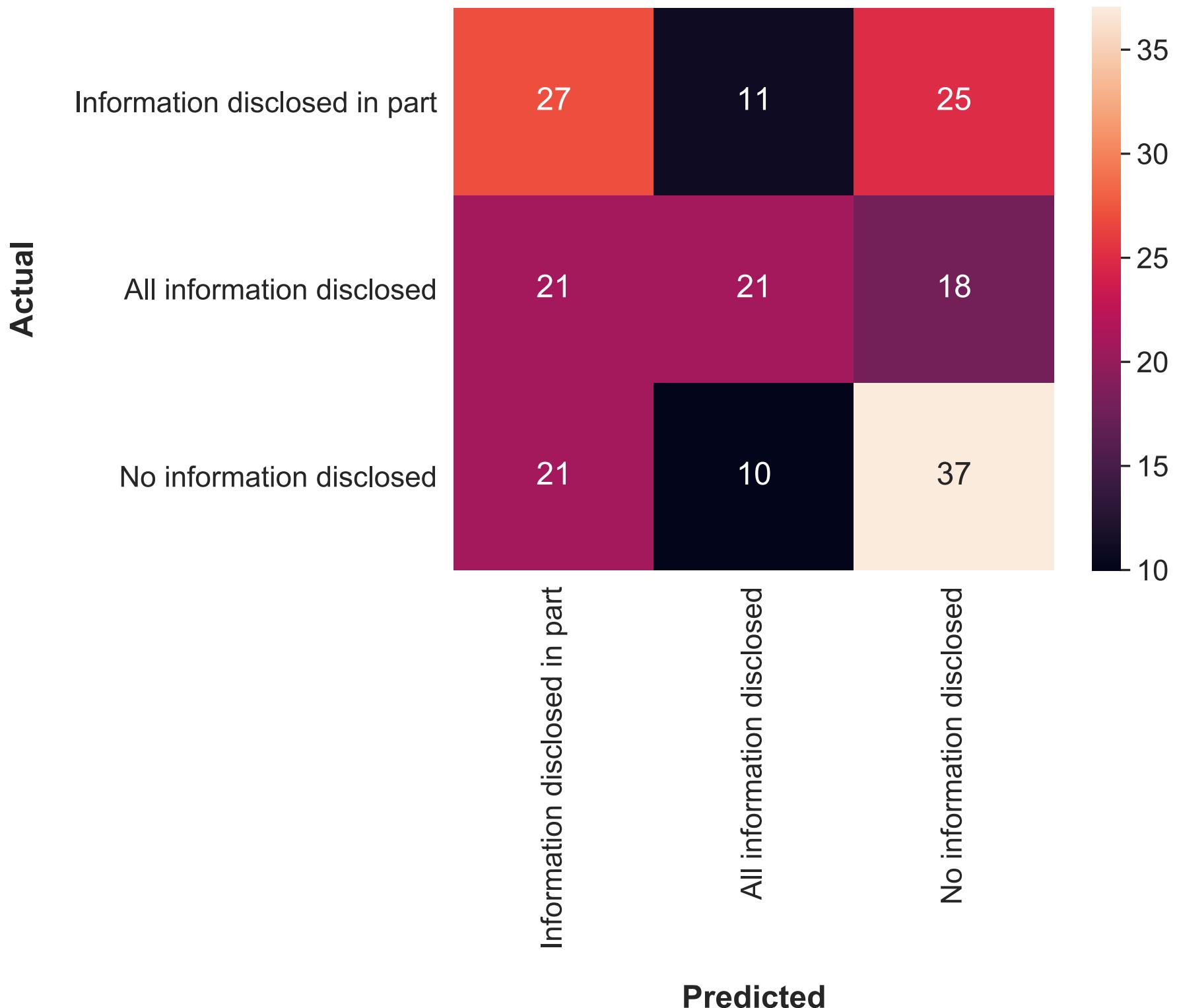
MultinomialNB, tf-idf, full set



Full data split into three categories only

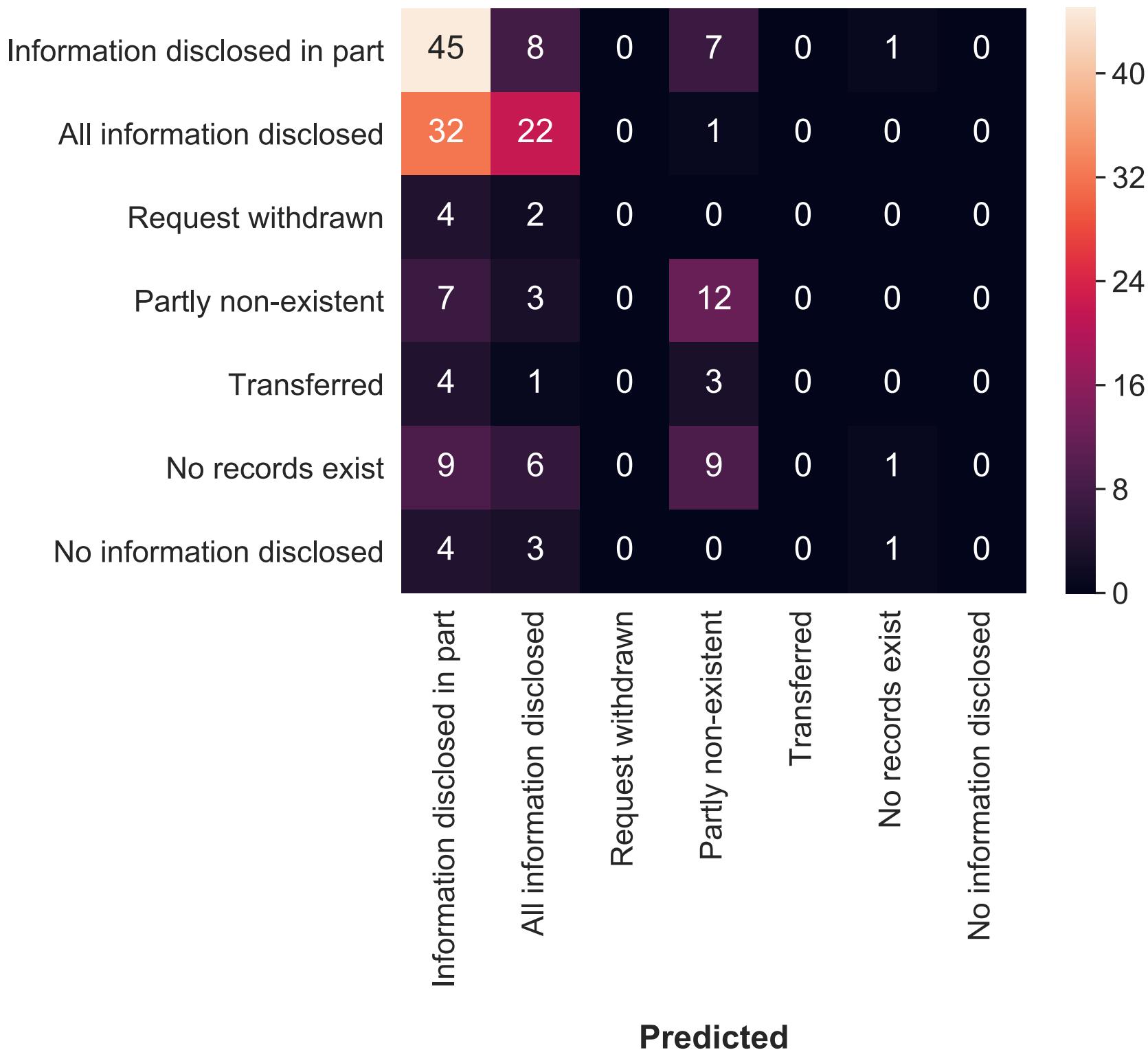


LogisticRegression, tf-idf, 3 bins



MultinomialNB, tf-idf, over 15

Actual



MultinomialNB, tf-idf, indep.

