a) I'd like a large amount of cash. I'd like a small amount of cash.

The above sentence shows that "large" and "small" are with opposite meanings in this case and they seem to fit in the sentence. On the other hand, "big" or "little" do not seem to quite fit in the sentences.

?I'd like a big amount of cash. ?I'd like a little amount of cash.

It could be that "large" and "small" are more likely to be used to describe quantity nouns like "amount". If this hypothesis is correct, then other quantity nouns like "degree" or "extent" should be described by "large" or "small" way more often than "big" or "little".

According to GloWbE(United States), "large" and "small" occur before "amount" and some other quantity nouns way more often than "big" or "small".

Noun/Adj	Occurance (n=3)				
	Large	Big	Small	Little	
Amount	1380	38	1999	71	
Degree	257	9	102	12	
Extent	458	4	44	5	

According to the data obtained, "large" and "small" indeed seem to fit better before quantity nouns than "big" and "little.

b) Here comes a big dog. Here comes a large dog. Here comes a small dog. Here comes a little dog.

Both "large" and "big", "small" and "little" can fit into the sentence while "big" and "little" seems to be more common to be used to describe the size of animals.

Noun/Adj	Occurance (n=3)				
	Large	Big	Small	Little	
Dog	88	219	99	238	
Fish	100	342	203	158	
Chicken	14	75	16	66	
Snako	Ω	12	4.	6	

According to GloWbE(United States), other animals in other animal class seem to also be described as "big" and "little" more often.

- c) The dog let out a big yelp. The dog let out a little yelp.
- d) They made a big mistake. They made a small mistake. They made a little mistake.

While "small" and "little" seems to be interchangeable to describe "mistake", "big" makes more sense to fit into the sentence than "large". It is possible that "small" and "little" are interchangeable to measure metaphoric size but "big" is a lot more preferable than "large" to measure metaphoric size.

Noun/Adj	Occurance (n=1)				
	Large	Big	Small	Little	
Mistake	1	95	3	2	
Problem	6	180	27	30	
Issue	3	84	9	1	

According to the Time Magazine Corpus, "big" occurs way more often than "large" that "large" appears less than 10 times before the metaphoric size in the whole corpora. On the other hand, "small" and "little" appears before the metaphoric size in a very similar way.

e) What a cute big doggie! What a cute little doggie!

While both "large" and "big", "small" and "little" are both acceptable to describe animals according to b), "doggie" seems to be more informal and appear more in conversation. Therefore, "large" and "small" are too formal to fit in this context.

f) The twins are big for their age. The twins are small for their age.

In this context, the adjectives are to measure a one-dimension physical size(height or body size).

Reference:

 $\underline{http://www.f.waseda.jp/vicky/dissertation/chapter2.pdf}$

Semantic Relations and the Lexicon: Antonymy, Synonymy and other Paradigms by . Lynne Murphy