Would-Be-Presidential 20/20 Hindsight

The date is July 29, 2004.

You represent a political consultancy firm specializing in election processes and political advertising. A candidate from a major party has approached you asking for help with budgeting his campaign funds. The candidate receives $75 million of government funding and the national committee of his party has the right to spend $16 million more in a direct coordination with him.

Part I
Given this total amount (to be spent by November 2), you need to develop a strategy for buying advertising throughout the USA. Your strategy should be based on the following statistics for each state:
1. the number of electoral votes awarded by that state;
2. whether the state has the proportional vs. the "winner-takes-all" system;
3. the current distribution of voters among all parties (including "unaffiliated/independent");
4. the voters' susceptibility to political advertising;
5. the likelihood of attracting the voters currently supporting "minor" parties.

A successful strategy would allow for "incremental budgeting" (on a week-by-week basis) taking into account some measure of return per each dollar already spent in each particular state. Provide recommendations for the methods & the proportion of money that should be allocated to increase the voter turn-out (on top of the traditional media advertisement).

Part II
You estimate that, with probability P, a ballot initiative to scrap the "winner-takes-all" system might be approved in the state of Colorado. Note, that if this ballot passes, it might affect the results of the current elections. Generalize your previous strategy to take this into account.

In addition, provide an assessment for the governor's office of the state of Colorado on how the passage of this ballot is likely to influence the amount of in-state spending by the federal government.