genetics of organisms with nucleated cells[18]. In Cambridge, UK, Alan Coulson, John Sulston and their colleagues were working on a physical map of the nematode *Caenorhabditis elegans*[19]. *C. elegans* had been identified by Sydney Brenner as a powerful model to apply genetic techniques to study development and behavior of organisms containing differentiated organs, including a primitive nervous system[20]. John Sulston had mapped the lineage of every cell in the body of one developmental stage[21; 22], and others at Cambridge had traced the connections of the entire nervous system[23]. While the entire genomes of yeast and nematode were only the size of a singe human chromosome, many believed that similar techniques would prove applicable for the entire human genome, more than an order of magnitude larger. The prospects for physical mapping brightened in 1987, when David Burke and Georges Carle, working with Maynard Olson, developed a technique to clone DNA fragments hundreds of thousands of base pairs in length[24], considerably reducing the complexity of constructing large-scale physical maps.

The NRC committee ultimately redefined the project to embrace the entire set of genetic maps, giving much greater prominence to genetic linkage mapping and physical mapping than to sequencing. The committee also underscored the importance of organisms other than the human[25]. The committee recommended an annual budget of $200 million for 15 years, supporting the budget recommendations of a previous DOE advisory committee[26]. The budget recommendations of the two reports were quite similar, but where the DOE advisors urged DOE to take the lead, the NRC committee recommended only that there be a lead agency, and proffered NIH, DOE and NSF as the three options.

The congressional Office of Technology Assessment (OTA) project on the human genome initiative was approved in the same hour of the same day as the NRC study. While the NRC committee crafted a scientific strategy and made specific recommendations, the OTA report focused more on its policy rationale (why Congress should or should not support it) and the attendant policy issues. OTA surveyed international activity, and dwelt far more on issues of technology transfer, ethical and social implications of genome research, and research