Route And Trip Planning Assignment. Paper details: Program: Civil Engineering - Transportation Need to design a transit service network through using Google Earth and calculate/estimate multiple different costs and details related to the network in Microsoft Excel. Willing to pay more as it's not much of a essay, rather design and calculations. Doesn't necessarily have to be 6 pages, as long as all components of the assignment are met. Down below is the criteria and attached is the assignment data. If any other details are needed, please let me know! P.S - To open the Medicine Hat Transit Map file, Google Earth needs to be downloaded. The City of Medicine Hat in Alberta is looking to redesign its current transit system. As such, the city has approached our class to develop transit routing options and estimate costs and funding for a new transit service to start in the year 2024. Your responsibilities will be to do the following: Create a transit service network for the City of Medicine Hat based on data provided in the word document and the kmz file above Write a memorandum to the City of Medicine Hat Councilors justifying your transit system network, classifying/explaining each specific routing and how your network meets the standards set out in the above word document. Be sure to include issues you faced in terms of land-use planning or road connections, etc. that make it difficult to create an ideal network Estimate the operator and km costs of each of your routings as per your instructions in class based on details in the provided word document Estimate proposed ridership based on details provided in the word document Estimate the proposed passengers per route per hour by averaging them out over each bus on the route Calculate the proposed revenue and then the R/C ratio Write conclusions on why your system is the best for the City of Medicine Hat and whether they should purchase the 18 proposed buses or more/less based on your calculations. (Note; be sure to use your interlining knowledge in order to save buses if possible, especially in the peak hour) The student(s) must also submit an excel file or hand written calculations outlining all the above. I would HIGHLY suggest you use excel as: it's easier, you should get experience using it for employment and if you make a change to a route after calculations, it's simple to adjust compared to hand written calculations. The excel file should be organized such that I will be able to understand how your calculations were undertaken with minimal effort. Marks will be deducted if I cannot easily ascertain your calculations. Please note, that when designing a transit network, there is no “right” answer. Some networks are better than others, but the chosen network should be thoroughly justified, through explanations to town council. Students should remember that as transit planners, we are responsible to all local taxpayers, and not just the taxpayers who use the service. Please also note that Medicine Hat transit service does exist currently and you can find the routings on the Internet. Please DO NOT look for this service information until after you have completed your transit network. Their current service network is not the ‘right answer’ for this project and I would argue that it would be a ‘wrong answer’ as the information I have provided above is not based in reality and any proposed service map would not help you with this assignment. Additionally, if you look at any proposed service, you will become focused on the paths those routings follow and have difficulty being creative on your own. Please see below for a 20 minute video tutorial using Google Earth, the first 11 minutes explain how to work Google Earth and draw/modify routes. The second portion of the video explains how to save your files and typical issues that students encounter as saving isn't the most intuitive: https://cdnapisec.kaltura.com/index.php/extwidget/preview/partner\_id/1345362/uiconf\_id/44669531/entry\_id/1\_fm88yhlb/embed/dynamic