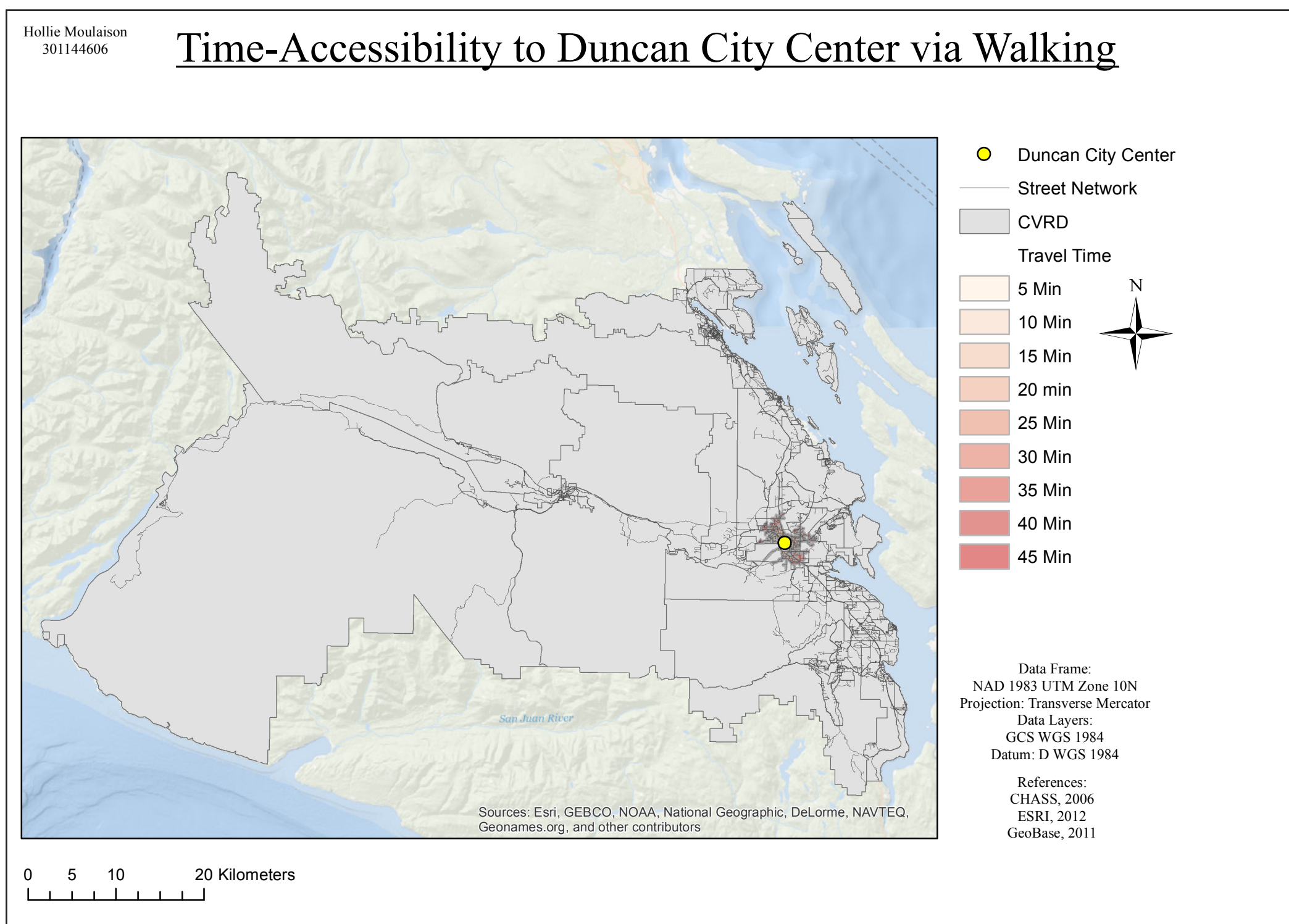


Manhattan Network Analysis

Demonstrating how a widely dispersed population, such as within the Cowichan Valley, is unable to properly support sustainable methods of transportation, like walking, biking, and busing.

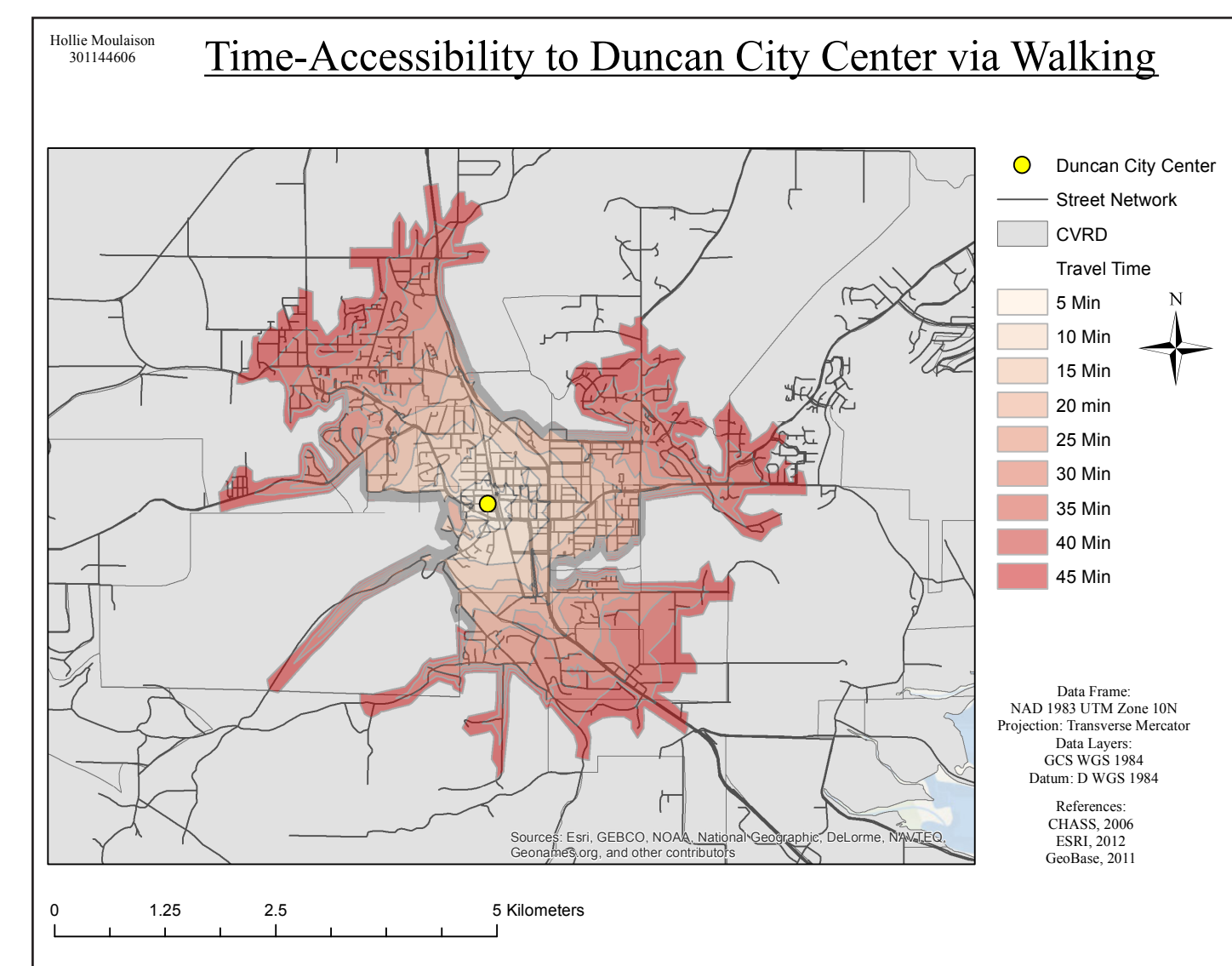
Scale = 1:530,000m



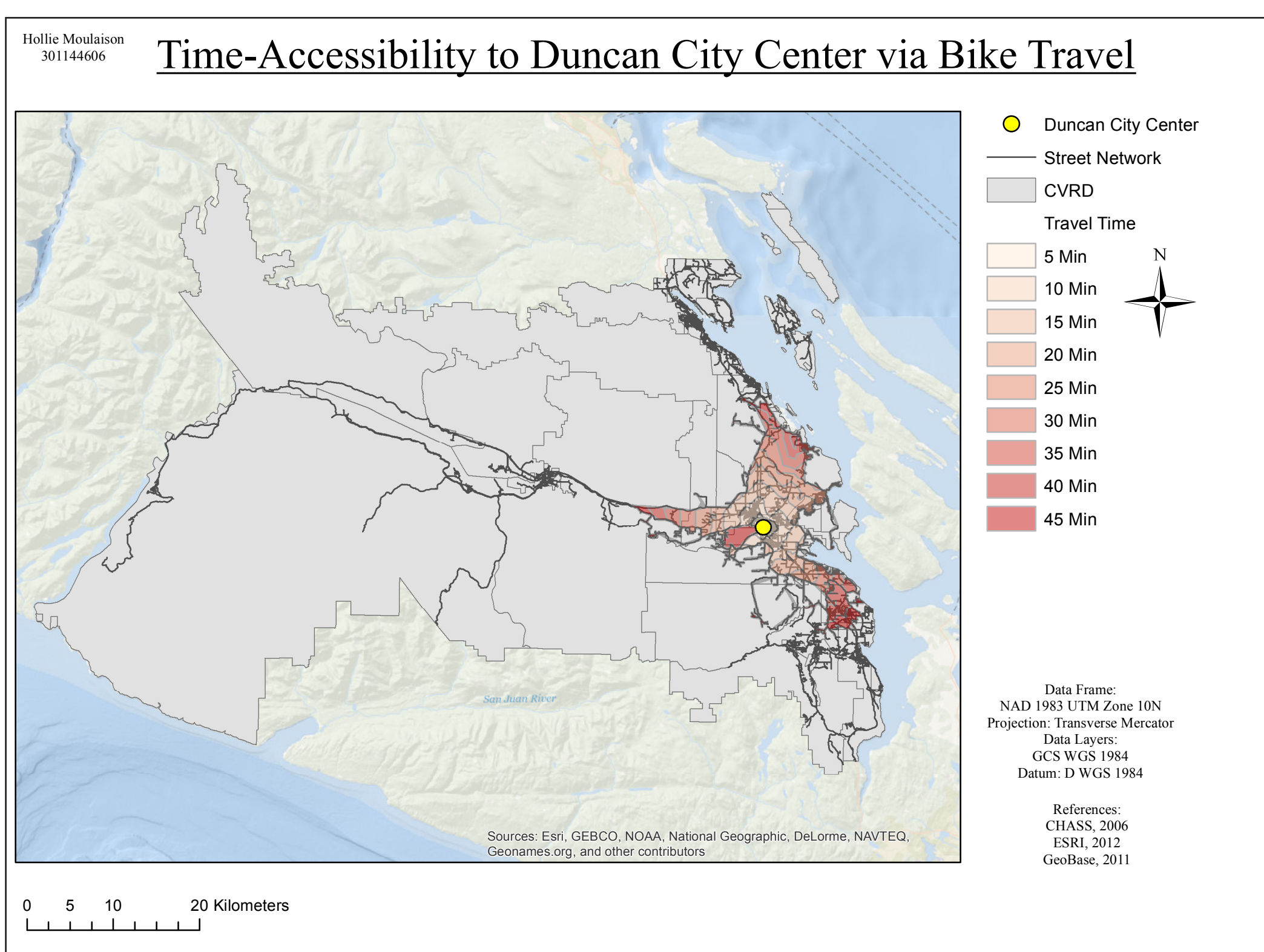
Walking Maps

Time analysis is based on the average walking speed of 1.4 m/s

(Enlargement)



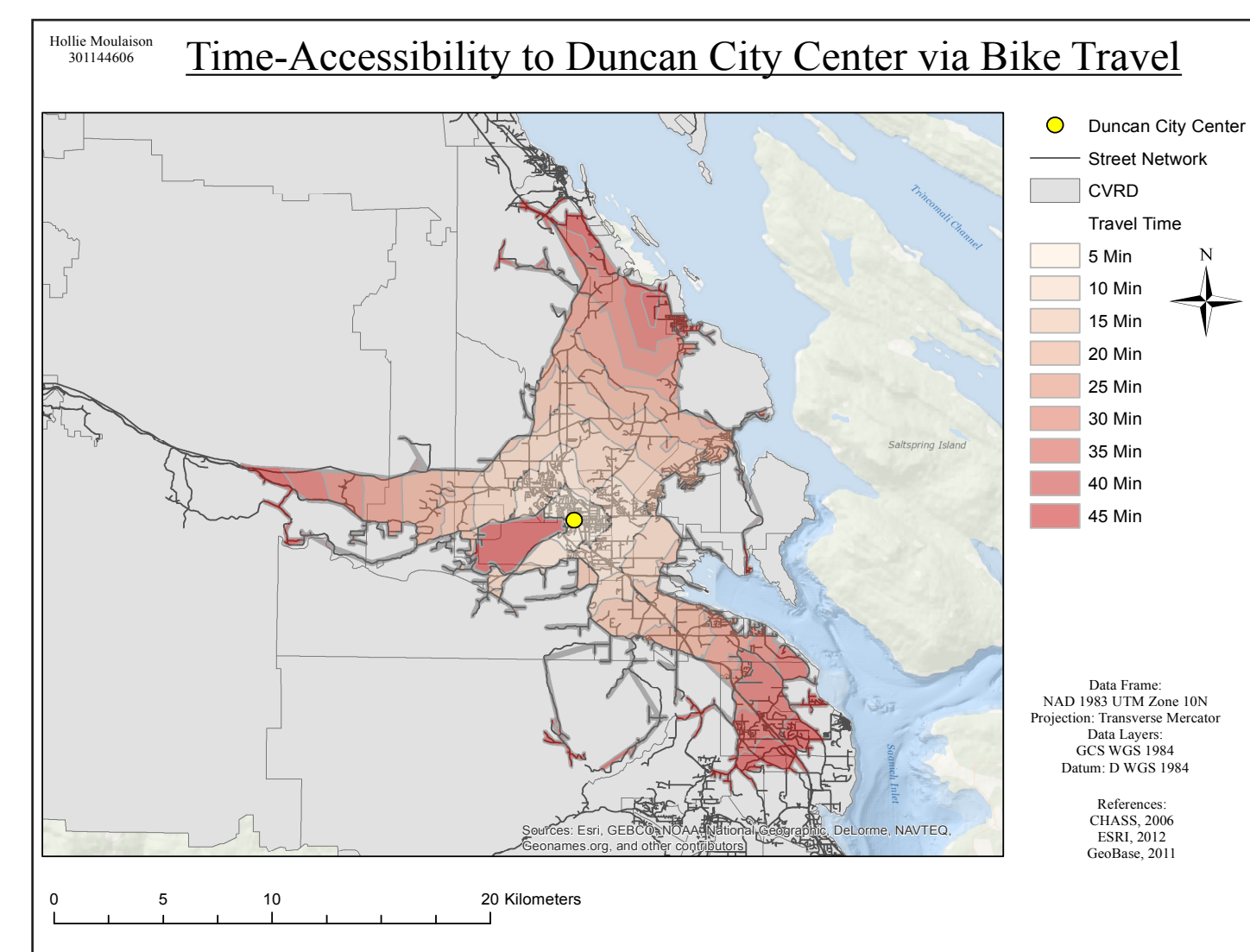
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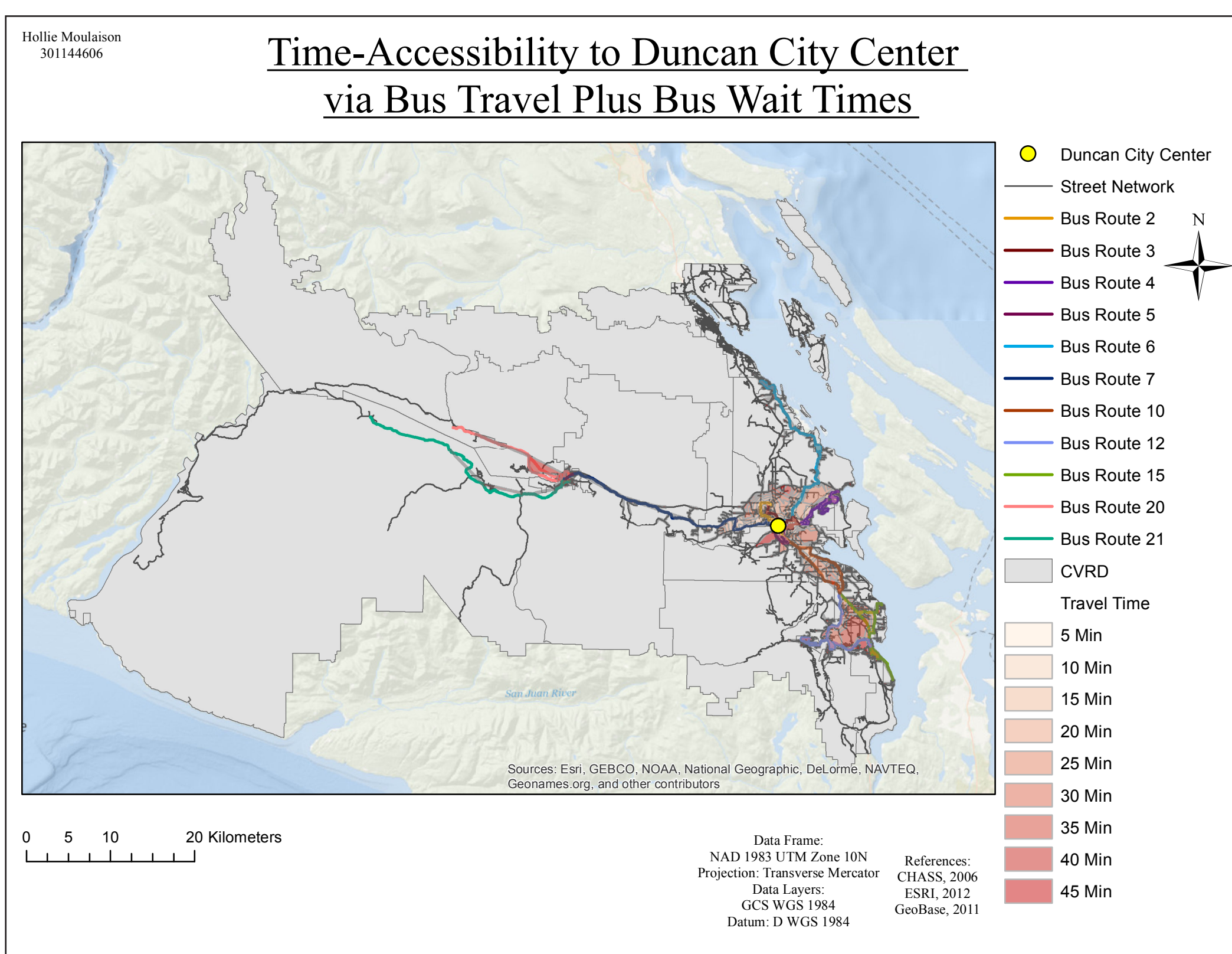
Biking Maps

Time analysis is based on the average biking speed of 6.3 m/s

(Enlargement)



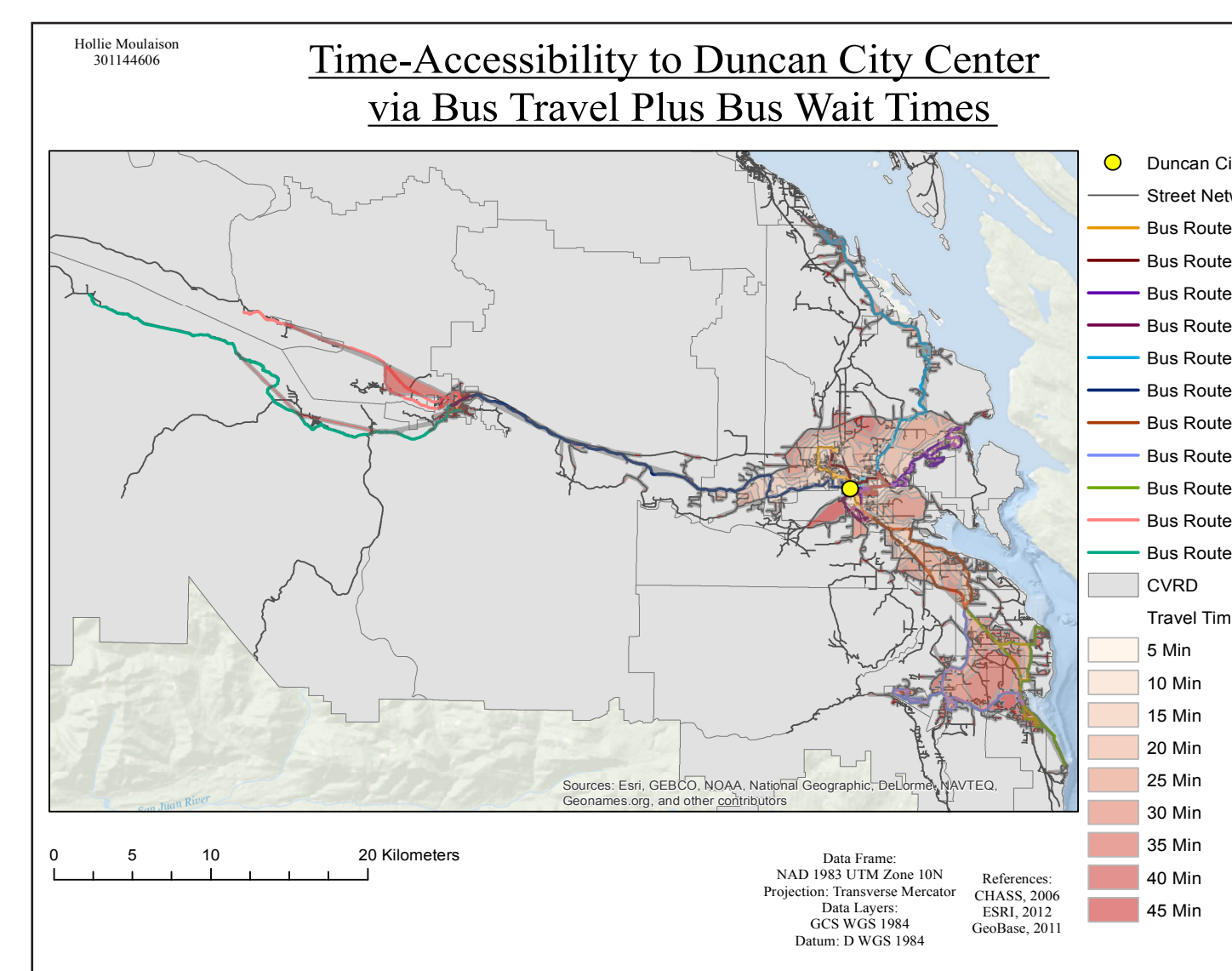
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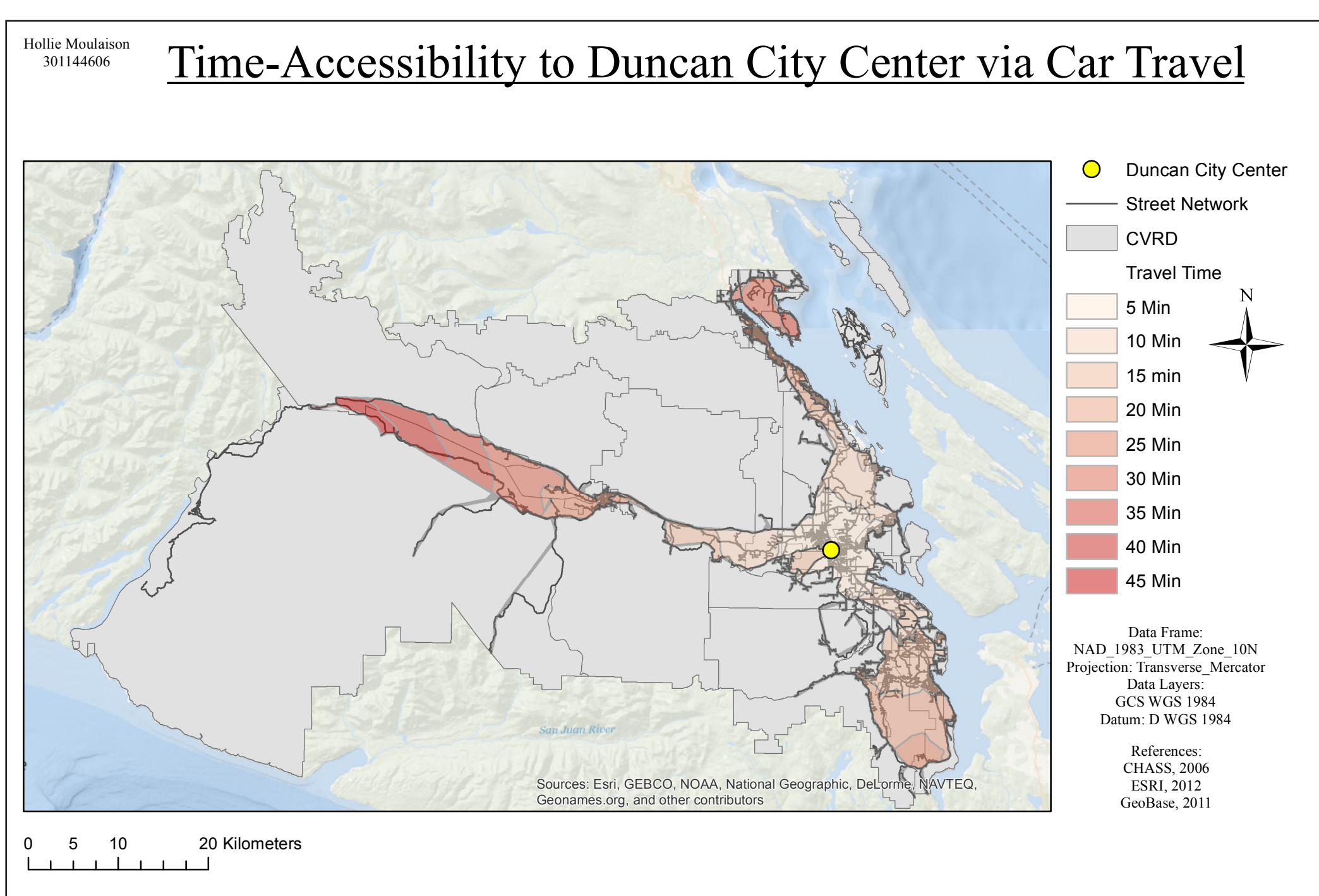
Bus Maps

Time analysis is based on the average speed limits within the Cowichan Valley, which is 24.4 m/s. Additionally, this analysis also includes the specific bus wait times of each route.

(Enlargement)



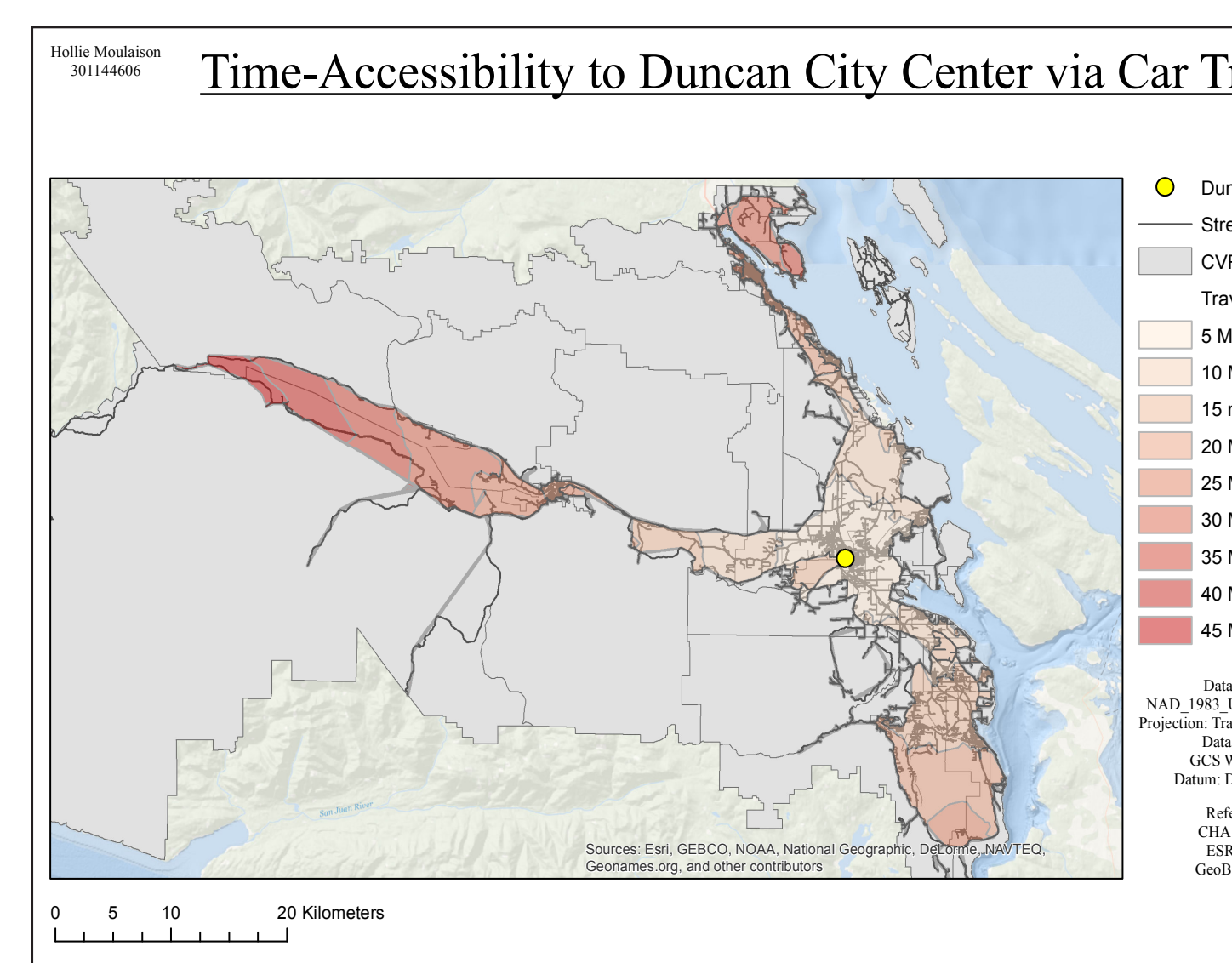
Scale = 1:530,000m



Car Maps

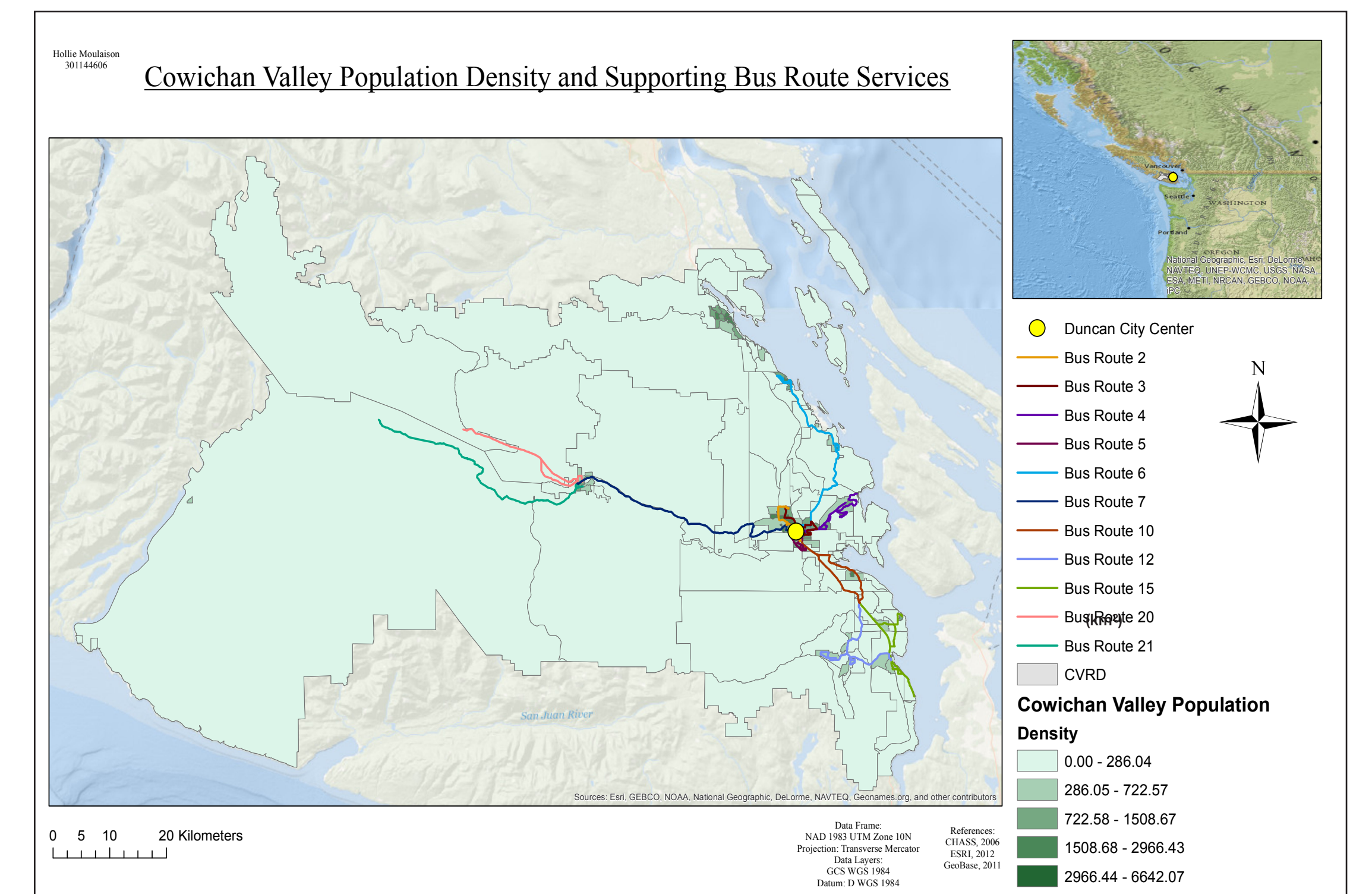
Time analysis is based on the average speed limits within the Cowichan Valley, which is 24.4 m/s.

(Enlargement)



Overview Map

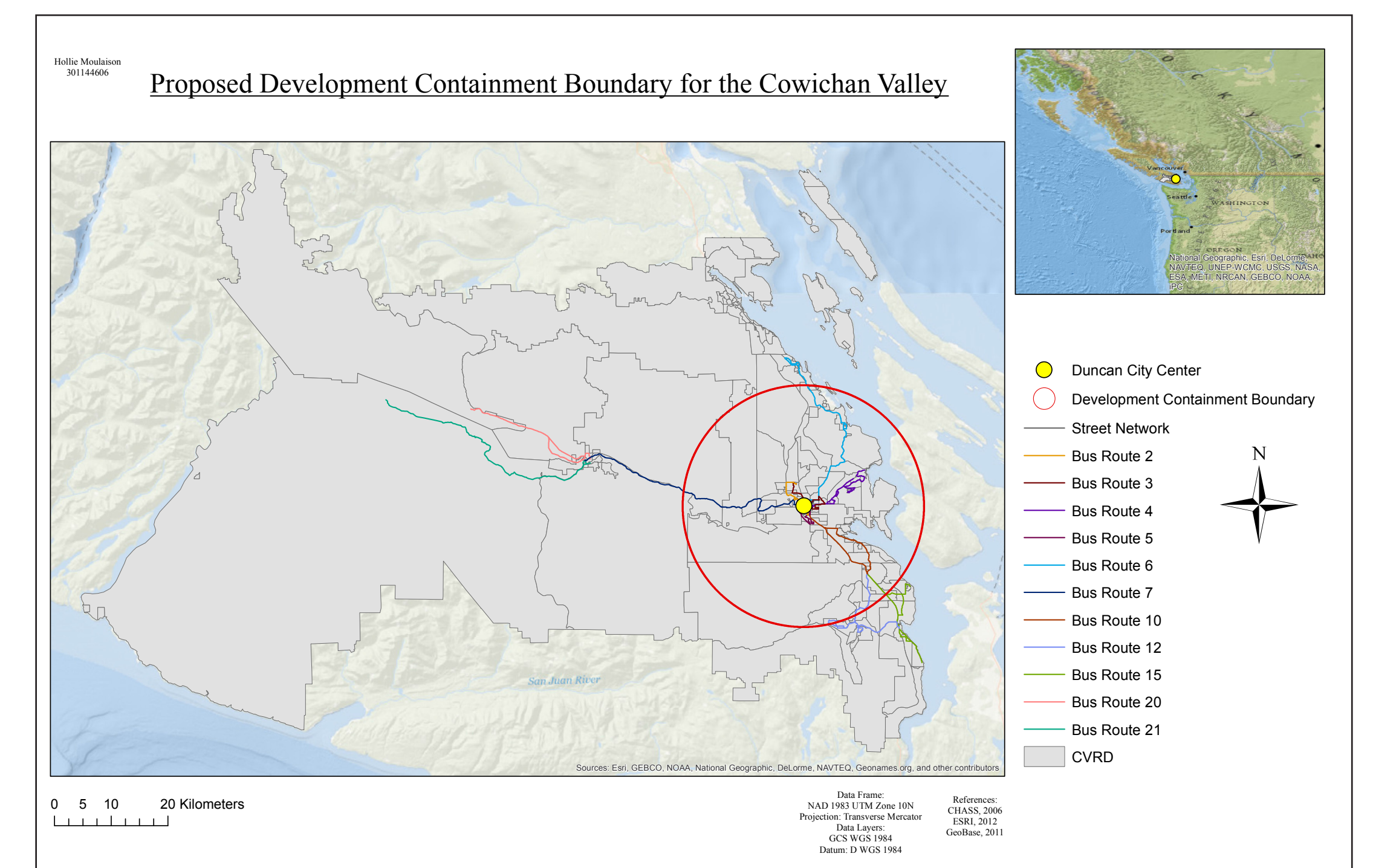
Scale = 1:530,000m



The areas that show higher population densities are supported by public transit. However, it is evident that a large portion of the region cannot be serviced by transit because vast population dispersal makes it both economically and environmentally unfeasible.

Proposed Containment Boundary

Scale = 1:530,000m



From the results of this study, a proposed solution to increase sustainable transportation within the Cowichan Valley would be to implement a designated boundary that future development must remain within. This containment boundary was derived based on the average area of land covered by each mode of transportation. If implemented, eventually such an operation would grant the opportunity for an increase in sustainable transportation methods, such as public transit, biking, and walking, by becoming more economically feasible. As well, these transport methods would become more realistic and appealing to residents.