

## Juneau Fixed Guideway Transit System (FGS) for increasing cruise ship visitor Carrying Capacity (CC), reducing CO2 emission

**DRAFT**

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Friends: please make this template you own; rename the file to begin your modeling "case" development  
All components and numbers are Bill Leighty's ad hoc rough estimates; this template need professional help to ach

### REFERENCES

"Alstom Train" hydrogen-fueled, fuel cell electric drive; add cars to any train for higher capacity

<https://www.youtube.com/watch?v=O3bUE9uHkqM>                      video

[https://www.youtube.com/watch?v=0vgxrsn\\_bY4](https://www.youtube.com/watch?v=0vgxrsn_bY4)                      video

<https://www.youtube.com/watch?v=53epal-rDoo>                      video

[https://www.youtube.com/watch?v=0vgxrsn\\_bY4](https://www.youtube.com/watch?v=0vgxrsn_bY4)                      video

<https://www.railjournal.com/fleet/alstom-hydrogen-train-french-regions/>

<https://www.alstom.com/press-releases-news/2018/9/world-premiere-alstoms-hydrogen-trains-enter-passenger-service-low>

Range: 500 miles per hydrogen fuel fill

Fuel consumption, miles per kg hydrogen fuel, for two-car train                      ??

Fuel consumption, miles per kg hydrogen fuel, for four-car train

Seating capacity, approximate, in "tour bus" seating configuration, per car of two-car train:                      Unknown; estimated 50 - 60

By the time Juneau's FGS is built, FCV train technology will have improved; rolling stock cost will be lower;  
hydrogen fueling electrolysis plants will be more efficient and reliable, lower in cost

" Tragedy Of The Commons " (Garrett Hardin) discussion:

Please see video discussing "The Commons" metaphor used by Garrett Hardin in the attached article, from:

["Prairie Festival", The Land Institute, Salina, KS, Scroll to 39:00 min to start; 1:19:00 to end = 40 min. Final few seconds are](#)

Consider Bollier's insights apply to Juneau's deliberations on cruise ship "Carrying Capacity" (CC), on large-scale tour

<https://centerforneweconomics.org/>

<https://landinstitute.org/>                      <https://landinstitute.org/news-events/prairie-festival/>

David Bollier, activist, scholar, and blogger who is focused on the commons as a new paradigm for re-imagining ec

He pursues this work as Director of the Reinventing the Commons Program at the Schumacher Center for a New Ec

Bollier has co-organized pioneering international conferences and strategy workshops on the commons, and consi

His blog, Bollier.org, is a widely read source of news about the commons, and his book Think Like a Commoner: A :

He and coauthor Silke Helfrich will publish Free, Fair and Alive: The Insurgent Power of the Commons in spring 201

Bolliers other books include Patterns of Commoning (2015) and The Wealth of the Commons (2012), both with co-

and Viral Spiral (2009), Brand-Name Bullies (2005), and Silent Theft (2002). In 2012, Bollier received the Bosch Berl

and cost of living (COL)

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: marred by a video editing error. <https://www.youtube.com/watch?v=9LwHeV0cJU8>

rism, and on Alaska's economy and lifestyle.

conomics, politics, and culture.

conomics and as co-founder of the Commons Strategies Group, an international advocacy project.

ults regularly with diverse activists and policy experts in the US and Europe.

Short Introduction to the Life of the Commons (2014), has been translated into six languages.

9.

editor Silke Helfrich; Green Governance (2013), co-authored with the late Professor Burns Weston;

in Prize in Public Policy from the American Academy in Berlin for his work on the commons.