

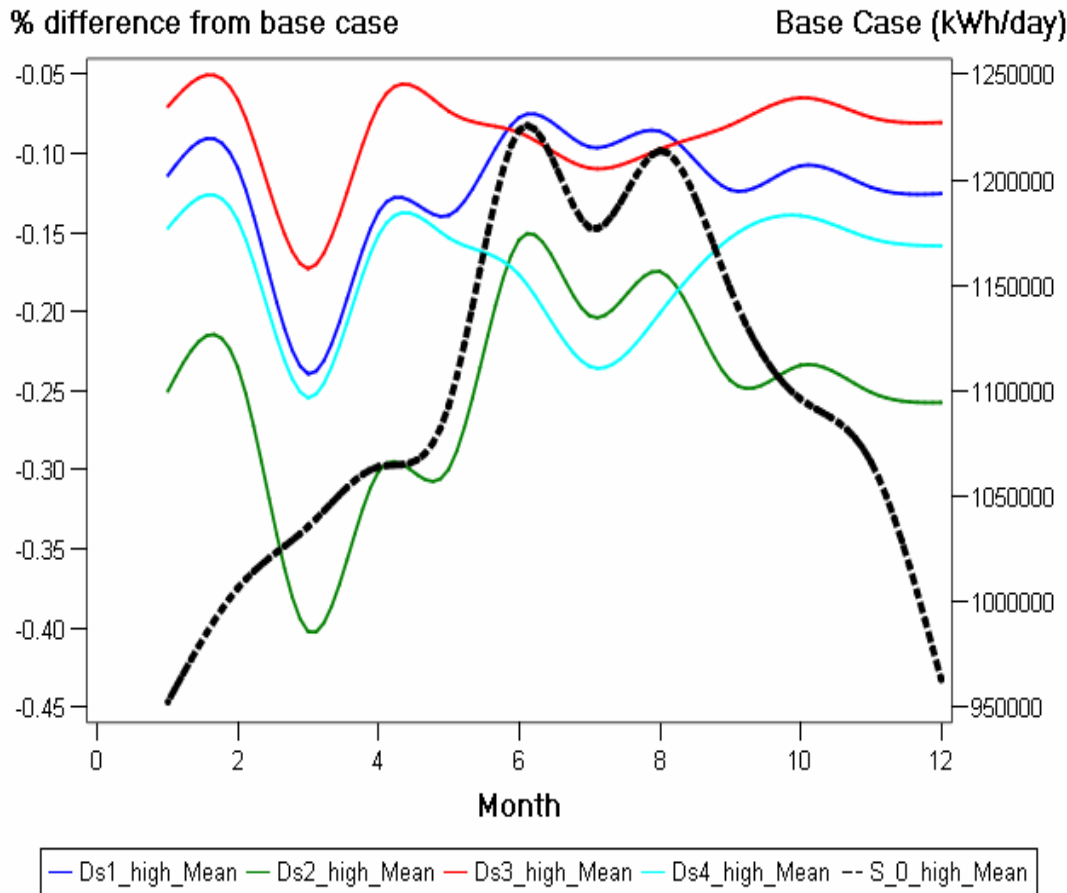
Some results from the 2 pilots

1. **Integrated assessment is essential**
2. Climate change is clearly on the policy agenda #5
3. Climate change included in high-level strategies
4. Translation into action is lagging
5. Quantitative modeling suggests greater responsiveness to population changes than to climate change.
6. But view of infrastructure being immune from climate change impacts is imprudent.

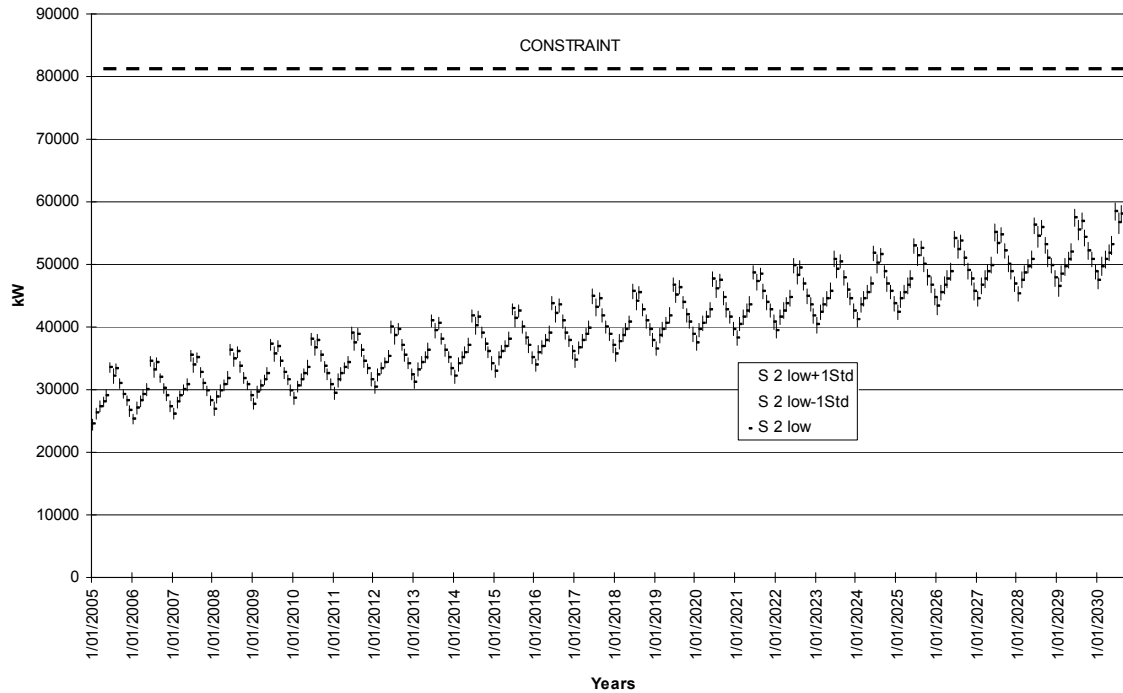
Results cont'd

7. Area's with the greatest potential for climate change impacts include:
 - a) Sea level rise impacting on road, buildings and storm water
 - b) Traffic volumes
 - c) Electricity demand
 - d) Water quantity and quality (water treatment costs)
 - e) Potential socio-economic impacts (insurance costs)
8. The lack of good time series data has been a limiting factor in these analyses.

Some quantitative results: Hamilton electricity



Hamilton electricity distribution capacity



Climate change impacts on road repairs costs per capita



Scenario	Change in cost cf BAU
S1	+6%
S2	+9%
S3	+0%
S4	-4%

So ...

- Need to complement modeling with qualitative analysis
 - Risk analysis:
 1. Define context
 2. Risk identification
 3. Risk analysis
 4. Risk management
- Let's do some work**

#5. Integrated assessment - risk identification for Nelson City

- Nelson City boundaries
- 1.5 deg inc mean temp; +5% rainfall; more westerlies
- 6 groups considering the risks from changes to climate (mean & extreme temp; mean & extreme precip; mean & extreme wind) on:
 1. Water supply (quality & quantity), storm water
 2. Transport
 3. Public health
 4. Energy
 5. Ecosystems
 6. across ISS (e.g. elec outage -> can't pump water -> public health).

Report back on: