

A Transition to Cloud Model Use

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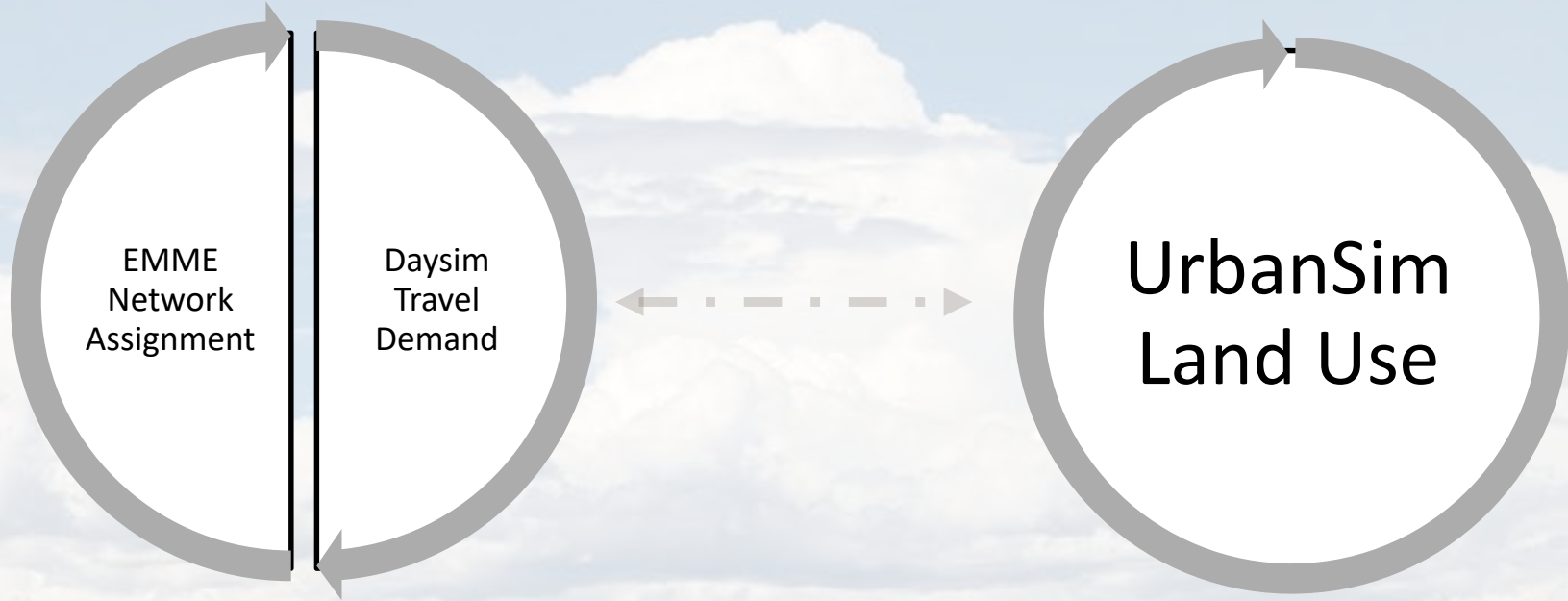
Puget Sound Regional Council

Why?

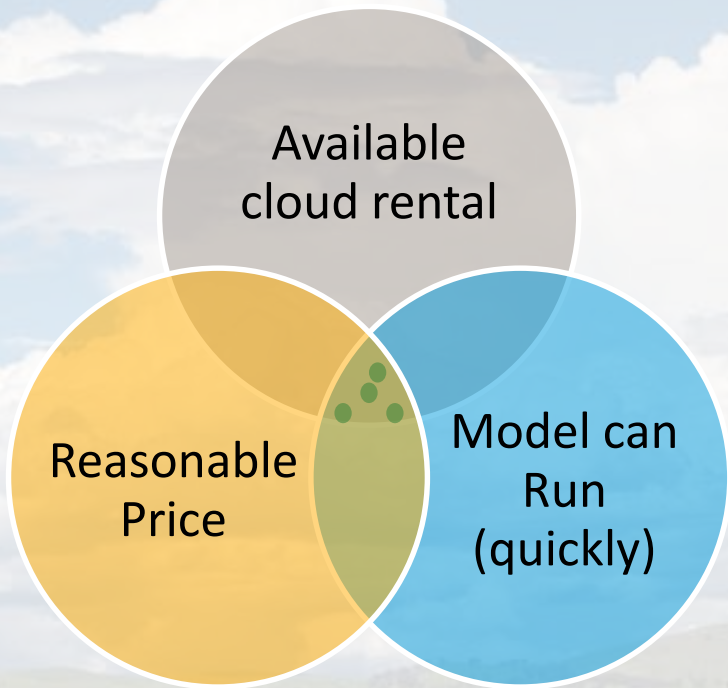


- To incorporate the latest computing advancements
- To scale during times of high demand
- IT trends

Our models



Possible hardware space



Tradeoffs



Price

Search
Time

Run
Time

Rough Travel Model Cost Estimation



Estimated Annual Cost with 200 runs per year	Price per Run	Hourly Price	Runtime (hours)	Type	RAM Optimized	Compute Optimized	RAM	virtual CPUS
\$8,000	\$40	\$2.86	14	PSRC servers			32	32
\$7,506	\$38	\$1.53	24	c4.xlarge		X	30	16
\$7,200	\$36	\$1.80	20	r4.xlarge	X		122	16
\$6,939	\$35	\$1.50	23	c3.xlarge		X	30	16
\$10,080	\$50	\$3.60	14	r4.8xlarge	X		244	32
\$18,432	\$92	6.14	15	m4.16xlarge			256	64

What are we doing now?



Cloud For production crunch time
- occasionally for development

The four-year old servers still work

Next steps



All the time cloud runs /
training/budgeting

Integrated Land Use Travel

Cloud for run archiving



For the field

Software needs to be flexible and scalable to a wider variety of hardware

Moving from fixed costs to variable costs:

New ways to manage hardware budgets and model run scheduling



Thank you.

