



TRANSPORTATION PLANNING INFORMATION EXCHANGE

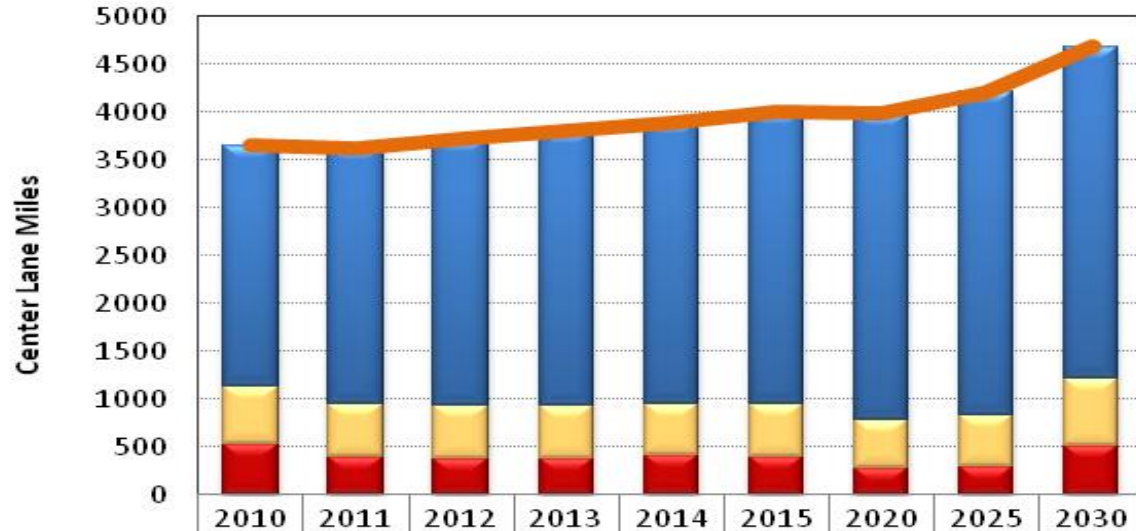
Can We Produce These Metrics?





- Yes!
- The reports of mature US asset management practitioners include elements to produce sustainability indices
- These data sometimes are explicit, sometimes only inherent



Utah DOT Investment Backlog

BackLog -Interstate, NHS and Non-NHS

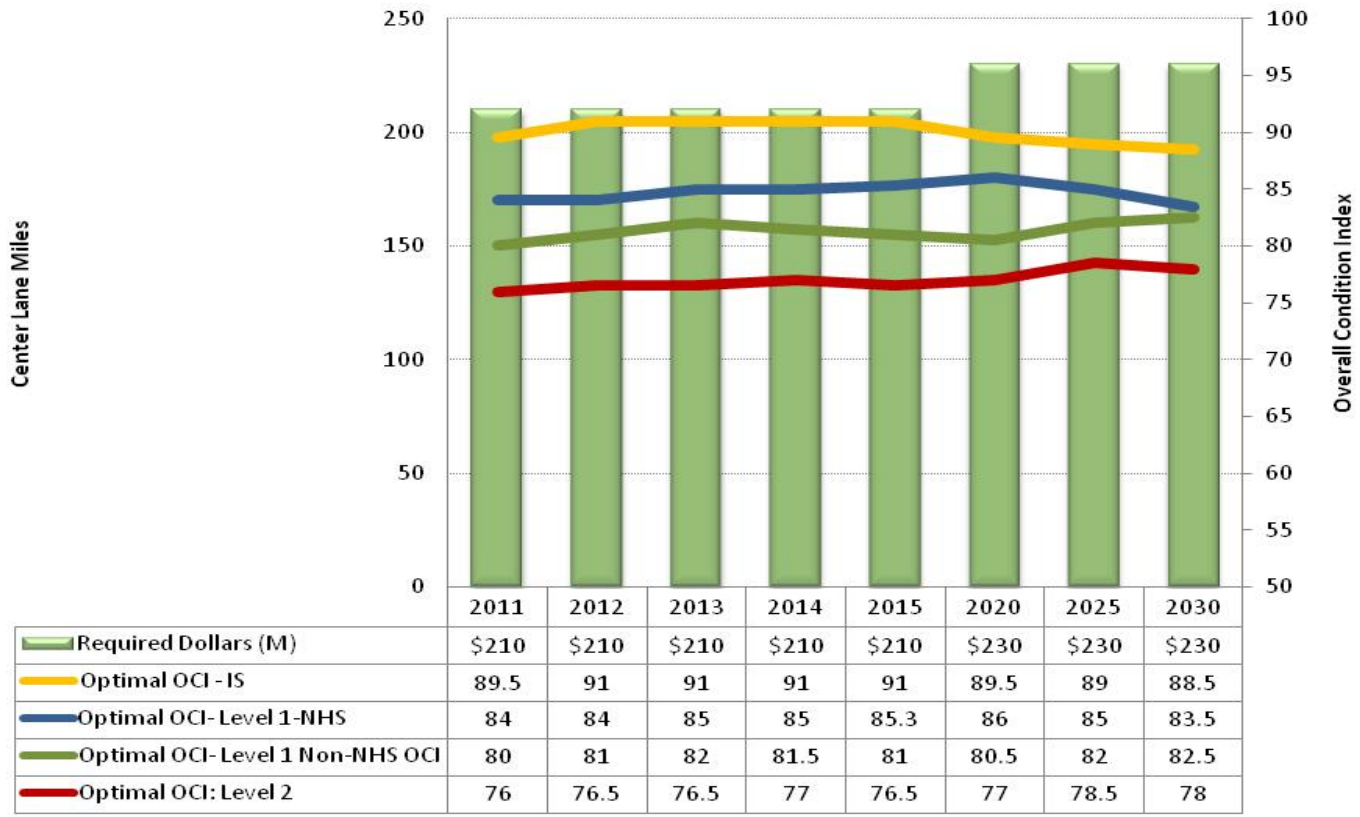


	Non-NHS CLM (No Work Done)	2530	2684	2791	2868	2948	3055	3213	3380	3465
	NHS CLM (No Work Done)	602	555	560	549	529	545	493	542	701
	Interstate CLM (No Work Done)	523	392	371	386	416	401	281	293	519
	Total CLM In Backlog	3655	3632	3722	3802	3892	4000	3987	4214	4685

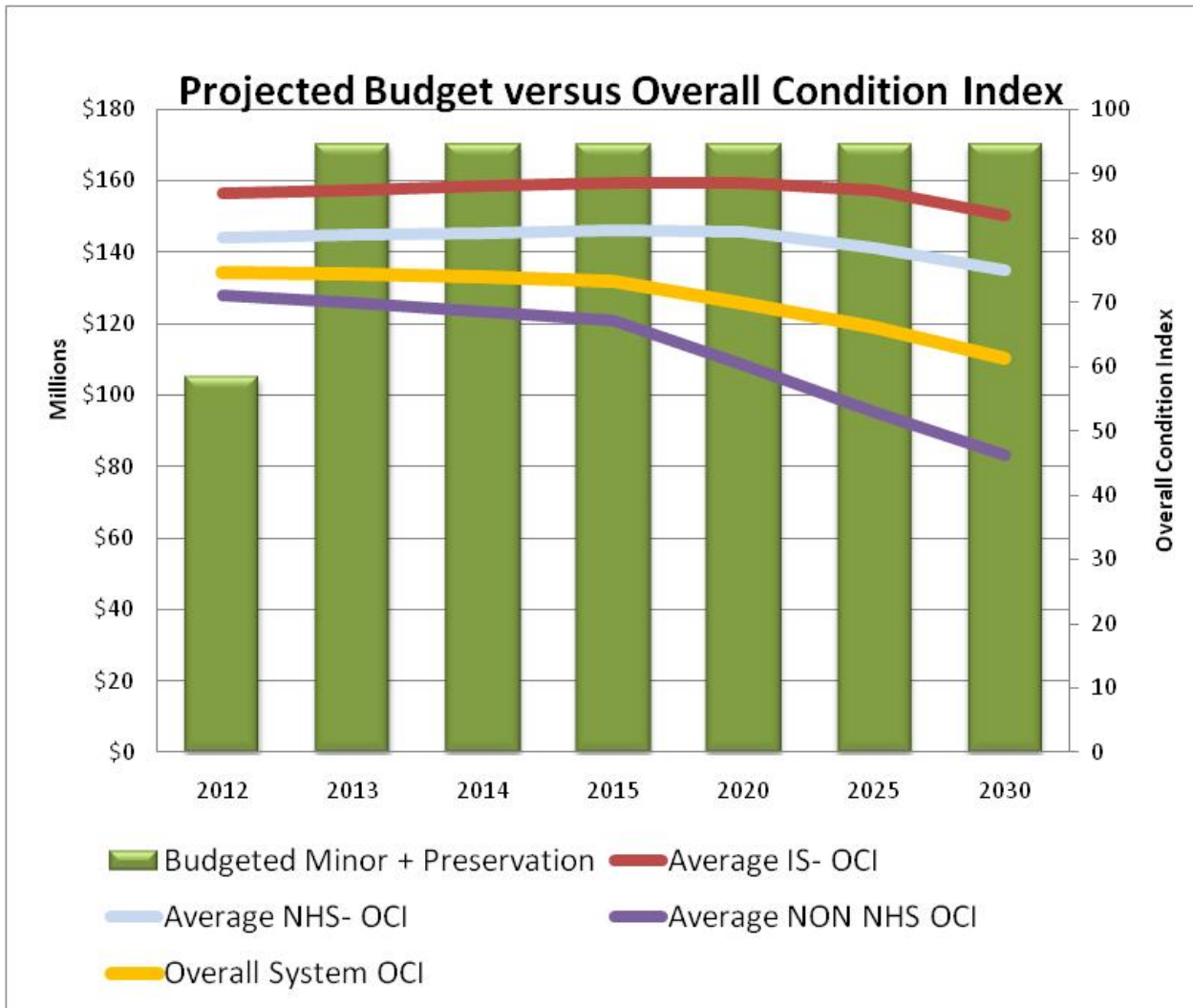


Optimal UDOT Pavement \$

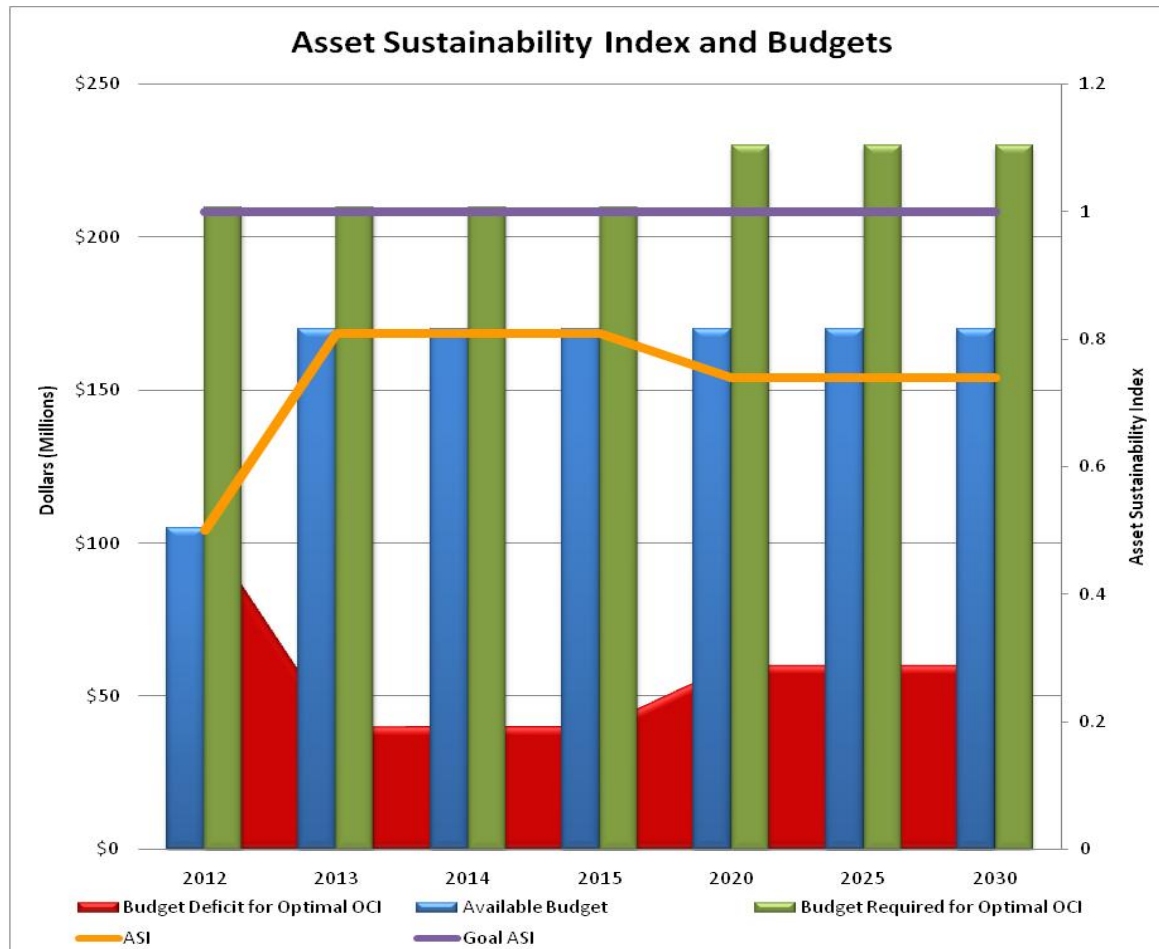
Budget Required for Optimal OCI: Interstate, NHS, Non-NHS and Level 2



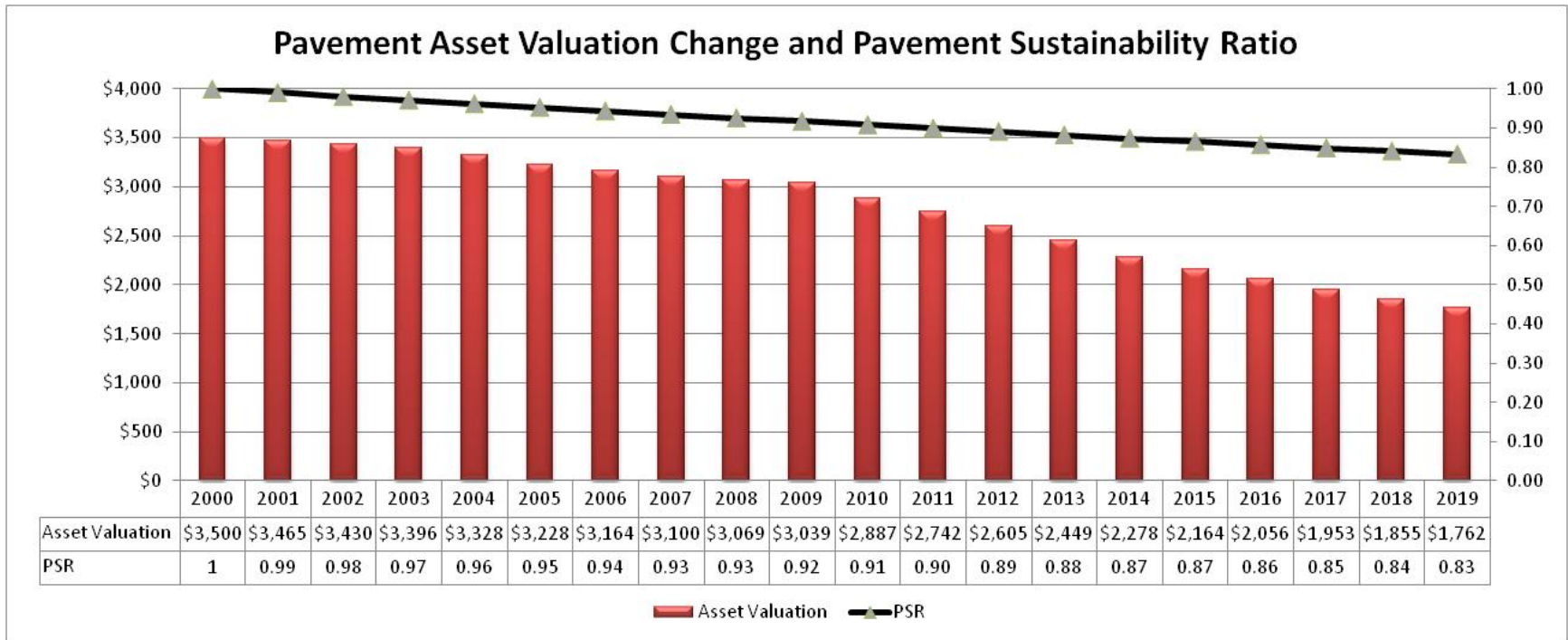
Utah Pavement Forecast



UDOT Ratio, Investment Gap



Declining Asset Ratios and Values



ASI by Program

Sustainability Ratios Over Time By Asset Class Or Activity										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Pavements	0.83	0.82	0.81	0.81	0.80	0.79	0.78	0.77	0.77	0.76
Major Routes	0.80	0.79	0.78	0.78	0.77	0.76	0.75	0.75	0.74	0.73
Arterials	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91
Collectors	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91
Pavement Rehabilitation/Replacement	0.40	0.40	0.39	0.39	0.38	0.38	0.38	0.37	0.37	0.37
Pavement Preventive Maintenance	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91
Bridges	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81
Preventive Maintenance/Preservation	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81
Sub and Superstructures	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.80	0.79
Decks	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82
Painting	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91
Maintenance	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
Guardrail	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
Pavement Markings	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
Drainage	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
Signage	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
Vegetation/Roadside	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
Pavement Surfaces	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
Overall ASI	0.88	0.87	0.855	0.84	0.83	0.82	0.81	0.79	0.77	0.75

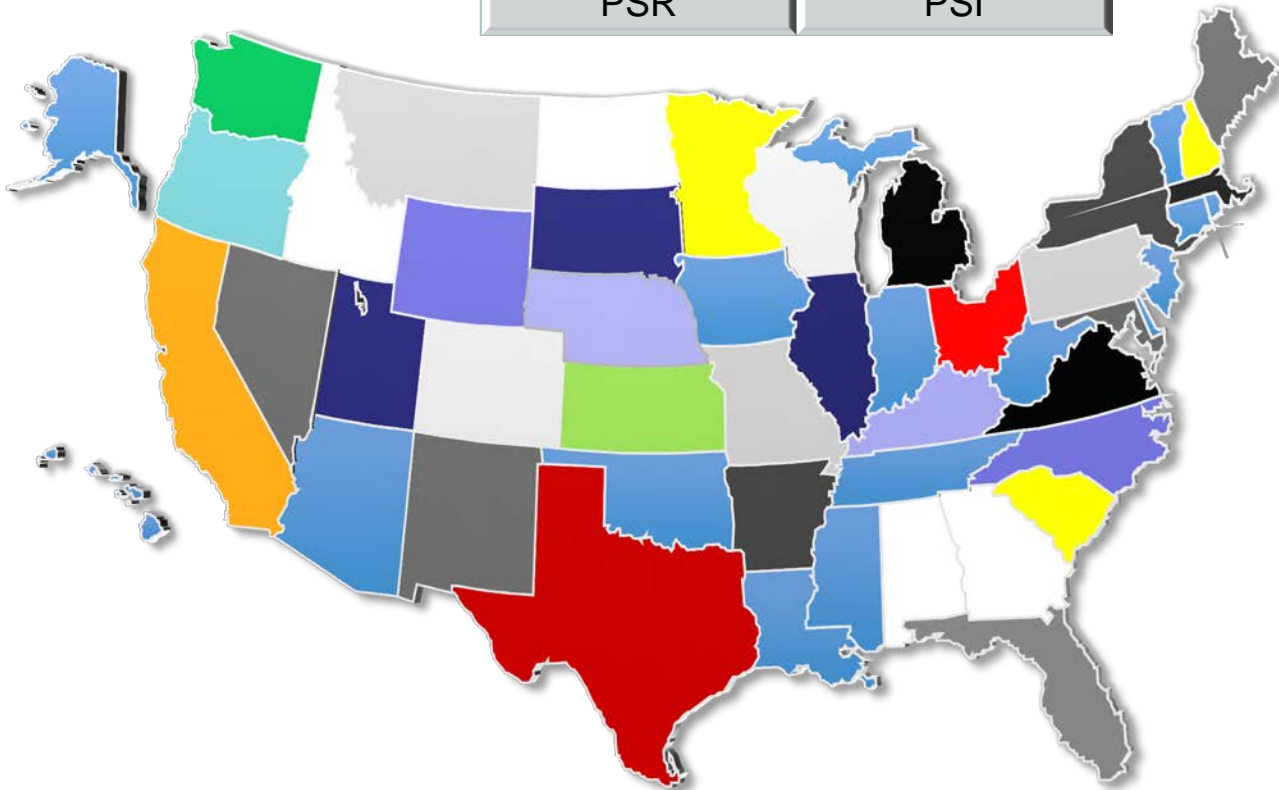


Sustainability Elements Exist

- The message: We can do this
- We can add to the public discourse credible forecasts of the consequence of current investments
- We can illustrate the size, the impact of our investment deficits
- We can illustrate the liability we are leaving



Measuring Pavement Conditions	
PCR	IRI
RSL	OCI
PSR	PSI



Conclusions

- Data exist to produce financial sustainability metrics
- They can add to the public discourse of intergenerational equity and legacy
- They can illustrate the future consequences of current actions



Questions?

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