

Dashboards Showcase vs. Annual Reports

Jacob Booth – Connecticut Department of Transportation

What is Connecticut

3rd smallest, 29th most populated

No county governments

169 towns





What is the problem

Annual report to Office of Policy and Management

Annual TAMP projections

Scenario Projections

"We're doing a news conference at noon..."

Asset Valuation

Asset Histo

	Special Structurer Maintained by CanaDOT (Inspected by CanaDOT)	Humber of Structures	6aad ^[1]	Fair ^[2]	Peer [3]						
	Podestrian - State	A#37	A03#	A039	A949						
	CT/artrak - State	D001	D002	D003	D004	ADDED (Bw	uay Maintai	and by S	tata)		
	Building-State	D005	Dees	D007	Dees	ADDED (Pre-					
	Cherter-Hadlyme Ferry (30002)	D009	De1e	De11	D012	ADDED (set.					urt)
	 	<u></u>	<u></u>	A44 3		****REMOTE					
	Subtatal	0	0	0	0	nerio rei			te Huy" - A		
						Structural	Functions				
	Highway Bridger Maintained by Otherr (Inspected by CanaDOT)	Humber of Bridges	6==4 ^[1]	Fair ^[2]	Paar ^[3]	7 Deficient	117				
	Teun NBI	A+49	A050	A#51	A#52	A#53	A#54				
	Taun Nan-NBI (05905) CannDEEP NBI	A055 A061	A056 A062	A457	A051 A064	A059	A060				
	ConnDEEP Non-NBI	A46.7	4463	A463 A464	A#74	A065 A071	A066 4072	BEN	07ED		
	Privato NBI	A073	A074	A#75	A076	A#77	A07\$				
	Privato Non-NBI										
	MDC NBI	Gov want	s to kno	w how r	nanv bri	dges are	e struct	turally	v defic	ient? –	
	MDC Non-NBI (06810) Subtatel				inany isri		- 56, 60,	car an	,		
	Jabtata	bad shape	2								
	Special Structures Maintained by Others										
	Special Structurer Maintained by Otherr (Inspected by ConnDOT)										
		Garrett E	ucalitte								
	Production - Town	Garrett Et	acantto								
	Pedertrian-CanaDEER Pedertrian-Taun/CanaDEEP	Commissi	oner								
	Pedertrian - TaunrCannDEEr Pedertrian - Private	A105	A106	A107	A101						
	Building Taun	<u></u>	<u>A110</u>	A111	A112	****REMOTE	D**** (01627	and 866	31 ere nau	part of the b	hitohood
	Reiles ed - Privete (00492)	A112	A114	A115	A116	1				lunnel Inven	
	Subtatal		0	0	0						
	Special Structurer Maintained by Other	organ, Josh	D. 12/28	3/2023 11	:33 AM						norship ridgo
	(Fertical Clearance collected by ConnDO										
	Railroad - Motro-North RR over State Huy ^[6]	Hey Jake	doory	our offi	co hava	a stat t	hat Lor	n ind	duda i	_	
	Railroad - Other RR over State Huy ^[6] Subte	пеу заке	- aoes y	our on	ce nave	a stat t	natica	an inc	Jude I	11	
	346	year-end	nress r	د معدماه	hout the	a numb	or of h	ridae	e brou	abt	
		year-enu	i press ii	cicase a	Dout the			nuge	5 0100	igin	
	Structure Inventory	into state	of good	d repair	?						
t	HHS HBI Bridger	anto state	0. goo.	- Cpuil							
										_	
	Nun-HHS HBI Bridger	B013	B014	B015	B016	B017	B01\$	\$VALUE!	\$VALUE!		
	TOTAL MBI Bridger	•	•	•	•	•	•	*****	\$DI7/0!		
	NHS New-NRI Brideer	B007	B001	B009	B010	B011	B012	#VALUE!	#VALUE!		
	MHS Han-MBI Bridger							r	r		
	Han-HHS Han-HBI Bridger	B019	B020	B021	B022	B023	B024	\$VALUE!	\$VALUE!		
	TOTAL Nun-NBI Bridger MHS & Nun-NHS NBI Special Structurer over	•	•								
		-		•	•	•	•	*****	*DI7/0!		
									*DI7/0!		
	State Highways (sale arelinal aleasans reported	B025	B026	B#27	• B02#	• N/A	• N/A	***** N/A			
									*DI7/0!		
	State Highways (sale areliad aleasans reported Nun-NHS Nun-NBI Special Structures uper	B#25	B026	B#27	B02\$	N/A	N/A	N/A	BDIV/0!		
	State Highwayz (solg arctical alexeans reported Hun-HHS Hun-HBI Special Structurez uwer Waterwayz (sorline) alexeans on arcded as BDI	B#25	B026	B#27	B02\$	N/A	N/A	N/A	BDIV/0!		
nrv.	State Highusyz (est, artifad starsaur reported Han-MHS Han-MBI Special Strecturar meer Vaterusyz (errlind stream est erreted an BH) TOTAL NHC and Non-NHC Bridger	Bê25 Bê29 EVALUEI	B026 B030	B#27 B#31	B028 B032	N/A N/A	N/A N/A	N/A N/A	BDIT/OI	ew - De	f
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ory	State Highusyz (est, artifad starsaur reported Han-MHS Han-MBI Special Strecturar meer Vaterusyz (errlind stream est erreted an BH) TOTAL NHC and Non-NHC Bridger	Bê25 Bê29 EVALUEI	B026 B030	B#27 B#31	B028 B032	N/A N/A	N/A N/A	N/A N/A	BDIT/OI	ew - Pe	rf.
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ory	State Highway Josh and Handle Stracture reported Hand-HIS Hand HBI Special Stracture report TOTAL HHS and Non-NHS Bridger Expenditures by Work	Bezs Bezs Fynnifi Type	B#26 B#34 Consiste B##2	B027 B031 PV4111F1 ncy Revi	B#22 B#32 EW-Finan B##4	N/A N/A ncial	N/A N/A Cons	N/A N/A istenc	N/A N/A Cy Revi	ew - Pe	rf.
ory	State Highwayz (and an indicated at a constraint of the second structure of th	ве25 Ве29 ФУЛПЕТ Гуре Ве13	Beze Beze Evaluet Consiste	B#27 B#31 PVATHET ncy Revi B##3 B#15	B#2# B#32 EW-Finan B##4 B#16	N/A N/A Docial B005 B017	N/A N/A Cons Bees	N/A N/A istenc	*DIT/0: N/A N/A Cy Revi *VALUE!	ew - Pe	rf.
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Inventory and Condition

(1) CunnDOT Rating of "Good" includer Federal Rating Values of 7 or above (2) CunnDOT Rating of "Fair" includer Federal Rating Taluer of 5 & 6

#YALUE!

(3) CunnDOT Rating of "Pour" includes Federal Rating Talues of 4 or lass

TOTAL NHS and Non-NHS Bridges

(4) Structurally Deficient includes "punt" rated bridges & structures, bridges with "very luw" lund ratings (less than 12 Tuns capacity) which require

replacement, and bridger with an insufficient waterway upening cauring frequent flunding with severe traffic delays. (5) Functionally Obsulate includes bridges with apprairais of 3 or lass for the deck geometry, underclearances, approach roadway alignment,

SYALUE! SYALUE! SYALUE!

Dashboards to Stop the bleeding

Working with Mayvue on Annual Performance Services

Initial dashboards prepared covering projections

Borrowed and learned from originals

Our inventory is segmented

NBI vs. Non-NBI Municipal vs. State Busway bridges Non highway structures Railroads owned by CTDOT



Annual Fact Sheets

target_year <u>↓≞</u>	NHS_NBI_PctGood \$	NHS_NBI_PctPoor \$	CT_Maint_SOGR
Search	Search	Search	Search
2023	0.1294	0.069	0.9542
2024	0.1366	0.069	0.9562
2025	0.1367	0.076	0.9534
2026	0.1568	0.0765	0.9519
2027	0.1426	0.0774	0.9527
2028	0.1558	0.0808	0.9512
2029	0.1535	0.0809	0.9467
2030	0.1486	0.0847	0.9425

Scenario	Asset Group	Condition	2024	2025
Scenario 1	NHS-NBI (% deck area (sq. ft))	Good	14.0%	13.79
STIP Only		Poor	7.2%	7.9
	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	96.59
		Poor	3.4%	3.5
Scenario 2	NHS-NBI (% deck area (sq. ft))	Good	14.0%	13.79
281M	NIIS-NDI (% deck area (sq. tr))	Poor	7.2%	
201111	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	
	cr-bor maintained (vi by ii or bridges)	Poor	3.4%	3.5
		1.001	5.470	5.5
Scenario 3	NHS-NBI (% deck area (sq. ft))	Good	14.0%	13.7
375M		Poor	7.2%	7.9
	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	96.5
		Poor	3.4%	3.5
Scenario 4	NHS-NBI (% deck area (sq. ft))	Good	14.0%	13.7
481M		Poor	7.2%	7.99
	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	96.5
		Poor	3.4%	3.5
Scenario 5	NHS-NBI (% deck area (sq. ft))	Good	14.0%	
750M		Poor	7.2%	7.9
	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	
		Poor	3.4%	3.5



Annual Fact Sheets pt 2

What is the Year of Data Collected

\$ 3 / 15 / 2023							
		Count (Bridges)				Deck Area (sq ft)	
Responsibility	System	Good	Fair	Poor	Total	Good	Fair
CTDOT-Maintained	NHS-NBI	355	1404	43	1803	3,717,664.20	21,700,144.50
Maintained by Others	NHS-NBI				21		
Total	NHS-NBI				1823		

CTDOT-Maintained Bridge Inventory & Condition

		Count (bridges)			
Responsibility	System	Good	Fair	Poor	Total
CTDOT-Maintained	All	984	2890	143	4024
Maintained by Others	All				1456

NHS-NBI Bridge Inventory and Condition

What is the primary year of	2022
CTDOT NBI Submittal Date?	3/15/2023

		Count (bridg	Count (bridges)			
Responsibility	System	Good	Fair	Poor	Total	Good
CTDOT-Maintained & Mainta	NHS-NBI	357	1,419	47	1,823	3,577,834
Maintained by Others	NHS-NBI				20	
Total	NHS-NBI				1,843	

CTDOT-Maintained Bridge Inventory and Condition

What is the primary year of data collected?	
CTDOT Data Snapshot date?	

		Count (bridg	Count (bridges)				
Responsibility	System	Good	Fair	Poor	Total		
CTDOT-Maintained	All	972	2,881	151	4,004		
Maintained by Others	All				1,509		



Published CTDOT Factsheet

Roadway Bridges Maintained by ConnDOT	Number of bridges	Good	Fair	Poor
State NBI	2870	605	2187	77
State Non-NBI	1089	332	696	60
Adopted NBI	56	16	39	1
Adopted Non-NBI	3	0	3	0
Orphan NBI	79	25	52	2
Orphan Non-NBI	2	0	2	0
Total	4099	978	2976	140

Roadway Bridges Maintained by Others	Number of Bridges	Good	Fair	Poor
Town NBI	1352	563	674	120
Town Non-NBI	3	3	0	0
ConnDEEP NBI	15	7	8	0
Private NBI	4	2	1	1
Private Non-NBI	3	1	2	0
Total	1391	576	685	121

Roadway Bridges Maintained by ConnDOT (Inspected by ConnDOT)	Number of Bridges	Good ⁽¹⁾	Fair ⁽²⁾	Poor ⁽³⁾
State NBI	2,919	622	2,218	79
State Non-NBI	1,092	337	699	56
Adopted NBI	56	16	39	1
Adopted Non-NBI	3	0	3	0
Orphan NBI	79	24	53	2
Orphan Non-NBI	2	0	2	0
Subtotal	4,151	999	3,014	138

Roadway Bridges Maintained by Others (Inspected by ConnDOT)	Number of Bridges	Good ⁽¹⁾	Fair (2)	Poor ⁽³⁾
Town NBI	1,368	563	674	131
Town Non-NBI	5	3	1	1
ConnDEEP NBI	14	7	7	0
Private NBI	7	2	4	1
Private Non-NBI	3	1	2	0
Metropolitan District Commission Non-NBI (06810)	1	0	1	0
Subtotal	1,398	576	689	133



Why move to dashboards

Advantages

Quick and Easy Consistent and repeatable More detailed results Higher availability

Challenges

Initial set-up Data errors



Questions?

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