



Dashboards Showcase vs. Annual Reports

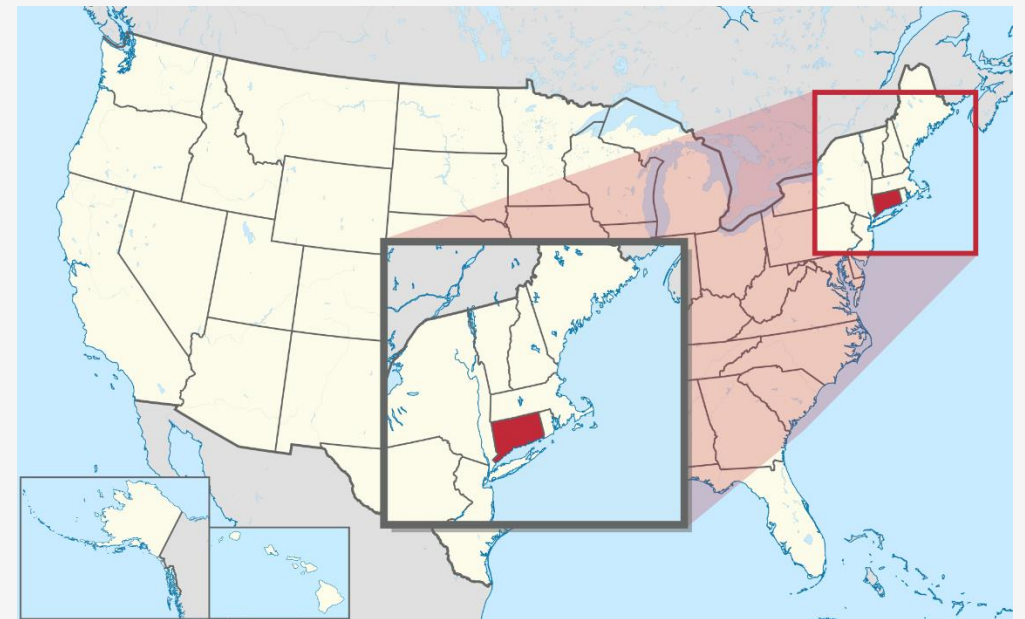
Jacob Booth – Connecticut Department of
Transportation

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

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



Special Structures Maintained by ConnDOT (Inspected by ConnDOT)	Number of Structures	Good I1	Fair I2	Poor I3	Structurally Deficient I4	Functionally Deficient I5
Pedestrian - State	A037	A038	A039	A040		
OT/Arts - State	D001	D002	D003	D004		
Building - State	D005	D006	D007	D008		
Chesler-Hadlyme Ferry (30002)	D009	D010	D011	D012		
Tunnel - State (00222)	A041	A042	A043	A044		
Railroad - State (004008)	A045	A046	A047	A048		
Subtotal	0	0	0	0		
Highway Bridges Maintained by Others (Inspected by ConnDOT)						
Taun NBI	A049	A050	A051	A052	A053	A054
Taun Non-NBI (05905)	A055	A056	A057	A058	A059	A060
ConnDEEP NBI	A061	A062	A063	A064	A065	A066
ConnDEEP Non-NBI	A067	A068	A069	A070	A071	A072
Private NBI	A073	A074	A075	A076	A077	A078
Private Non-NBI						
MDC NBI						
MDC Non-NBI (06310)						
Subtotal						
Special Structures Maintained by Others (Vertical Clearance collected by ConnDOT)						
Pedestrian - Taun						
Pedestrian - ConnDEEP						
Pedestrian - Taun/ConnDEEP						
Pedestrian - Private	A105	A106	A107	A108		
Buildings - Taun	A109	A110	A111	A112		
Railroad - Private (00432)	A113	A114	A115	A116		
Subtotal	0	0	0	0		
Special Structures Maintained by Others (Vertical Clearance collected by ConnDOT)						
Railroad - Metro-North RR over State Hwy I1						
Railroad - Other RR over State Hwy I1						
Subtotal						
Structure Inventory						
MHS MBI Bridges						
Non-MHS MBI Bridge	B013	B014	B015	B016	B017	B018
TOTAL MBI Bridges	0	0	0	0	0	0
MHS Non-MBI Bridges						
Non-MHS Non-MBI Bridge	B019	B020	B021	B022	B023	B024
TOTAL Non-MBI Bridges	0	0	0	0	0	0
MHS & Non-MHS MBI Special Structures near State Highways (only vertical clearance reported)	B025	B026	B027	B028	N/A	N/A
Non-MHS Non-MBI Special Structures near Waterways (vertical clearance not needed as MBI)	B029	B030	B031	B032	N/A	N/A
TOTAL MHS and Non-MHS Bridges	\$VALUE!	\$VALUE!	\$VALUE!	\$VALUE!	0	0

Gov wants to know how many bridges are structurally deficient? bad shape....

Garrett Eucalitto
Commissioner

Morgan, Josh D. 12/28/2023 11:33 AM

Hey Jake - does your office have a stat that I can include in year-end press release about the number of bridges brought into state of good repair?

Inventory and Condition	Scenario Projections	Asset Valuation	Asset History	Expenditures by Work Type	Consistency Review-Financial	Consistency Review - Perf.
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MHS MBI Bridge	B001	B002	B003	B004	B005	B006	\$VALUE!	\$VALUE!
Non-MHS MBI Bridge	B013	B014	B015	B016	B017	B018	\$VALUE!	\$VALUE!
TOTAL MBI Bridges	0	0	0	0	0	0	####	\$D1970!
MHS Non-MBI Bridge	B007	B008	B009	B010	B011	B012	\$VALUE!	\$VALUE!
Non-MHS Non-MBI Bridge	B019	B020	B021	B022	B023	B024	\$VALUE!	\$VALUE!
TOTAL Non-MBI Bridges	0	0	0	0	0	0	####	\$D1970!
MHS & Non-MHS MBI Special Structures near State Highways (only vertical clearance reported)	B025	B026	B027	B028	N/A	N/A	N/A	N/A
Non-MHS Non-MBI Special Structures near Waterways (vertical clearance not needed as MBI)	B029	B030	B031	B032	N/A	N/A	N/A	N/A
TOTAL MHS and Non-MHS Bridges	\$VALUE!	\$VALUE!	\$VALUE!	\$VALUE!	0	0	####	####

- (1) ConnDOT Rating of "Good" includes Federal Rating Values of 7 or above
- (2) ConnDOT Rating of "Fair" includes Federal Rating Values of 5 & 6
- (3) ConnDOT Rating of "Poor" includes Federal Rating Values of 4 or less
- (4) Structurally Deficient includes "poor" rated bridges & structures, bridges with "very low" load ratings (less than 12 Tonn capacity) which require replacement, and bridges with an insufficient waterway opening causing frequent flooding with reverse traffic delays.
- (5) Functionally Obsolete includes bridges with appraisals of 3 or less for the deck geometry, underclearance, approach roadway alignment,

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 ↓	NHS_NBI_PctGood ↕	NHS_NBI_PctPoor ↕	CT_Maint_SOGR
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="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 <i>STIP Only</i>	NHS-NBI (% deck area (sq. ft))	Good	14.0%	13.7%
		Poor	7.2%	7.9%
	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	96.5%
		Poor	3.4%	3.5%
Scenario 2 <i>281M</i>	NHS-NBI (% deck area (sq. ft))	Good	14.0%	13.7%
		Poor	7.2%	7.9%
	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	96.5%
		Poor	3.4%	3.5%
Scenario 3 <i>375M</i>	NHS-NBI (% deck area (sq. ft))	Good	14.0%	13.7%
		Poor	7.2%	7.9%
	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	96.5%
		Poor	3.4%	3.5%
Scenario 4 <i>481M</i>	NHS-NBI (% deck area (sq. ft))	Good	14.0%	13.7%
		Poor	7.2%	7.9%
	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	96.5%
		Poor	3.4%	3.5%
Scenario 5 <i>750M</i>	NHS-NBI (% deck area (sq. ft))	Good	14.0%	13.7%
		Poor	7.2%	7.9%
	CT-DOT Maintained (% by # of bridges)	SOGR	96.6%	96.5%
		Poor	3.4%	3.5%
Process Description, Assumptions, and Other Comments				



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 (bridges)				Deck Area (sq
Responsibility	System	Good	Fair	Poor	Total	Good
CTDOT-Maintained & Maint	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 (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?

Jacob Booth

Jacob.Booth@ct.gov

860-594-2862