## The NHL releases detailed play by play game-sheets for every game, allowing us to compute new and currently unreported metrics

The official game-sheets report ~300 distinct plays per game (face-offs, shots, blocked shots, hits, goals, penalties). The game-sheets contain a list of all players present on the ice for every play and distance to goal for every shot or goal.

Play situation
Description of play
Players on ice

#### NHL official game-sheet example

# Play By Play



**VEGAS GOLDEN KNIGHTS** 

Game 16 Away Game 7

**VISITOR** 



Tuesday, November 5, 2019 Attendance 15,435 at Nationwide Arena Start 7:08 EST; End 9:35 EST Game 0227 Final



CRLDDGCRLDDG

**HOME** 



**COLUMBUS BLUE JACKETS** Game 15 Home Game 9

#### Event Description # PerStr Elapsed VGK On Ice CBJ On Ice 0:00 20:00 **PGSTR PGEND** 20:00 0:00 20:00 **ANTHEM** 0:00 20:00 71 81 19 15 22 29 14 28 18 3 8 70 PSTR Period Start-Local time: 7:08 EST CCRDDGCRLDDG 71 81 19 15 22 29 14 28 18 3 8 70 0:00 5 1 EV FAC CBJ won Neu. Zone - VGK #71 KARLSSON vs CBJ #18 DUBOIS 20:00 CCRDDGCRLDDG 71 81 19 15 22 29 14 28 18 3 8 70 0:19 STOP PUCK IN BENCHES 19:41 CCRDDGCRLDDG 71 81 19 3 88 29 14 28 18 3 8 70 0:19 FAC CBJ won Neu. Zone - VGK #71 KARLSSON vs CBJ #18 DUBOIS 19:41 C C R D D G C R L D D G 71 81 19 3 88 29 14 28 18 3 8 70 0:27 19:33 8 1 EV SHOT CBJ ONGOAL - #14 NYQUIST, Wrist, Off. Zone, 29 ft. C C R D D G C R L D D G 71 81 19 3 88 29 14 28 18 3 8 70 0:30 19:30 9 1 EV BLOCK CBJ #14 NYQUIST BLOCKED BY VGK #88 SCHMIDT, Wrist, Def. Zone C C R D D G C R L D D G 26 19 67 15 22 29 38 28 71 3 58 70 0:52 19:08 10 1 EV SHOT VGK ONGOAL - #19 SMITH, Snap, Off. Zone, 46 ft. CRLDDGCRLDDG 26 61 67 15 22 29 38 28 71 3 58 70 SHOT VGK ONGOAL - #22 HOLDEN, Wrist, Off. Zone, 52 ft. CRLDDGCRLDDG 18:34 26 61 67 15 22 29 38 28 71 3 58 70 1:27 STOP GOALIE STOPPED (AFTER SOG) 18:33

### Game-sheet data extracted in Python Pandas

	Event	Period	Stre	ngth	Start	End	Description	Details	Away p1 name	Away p1 pos	Away p1 num
0	4	1			0:00	20:00	PSTR	Period Start- Local time: 7:08 EST	WILLIAM KARLSSON	Center	71
1	5	1		EV	0:00	20:00	FAC	CBJ won Neu. Zone - VGK #71 KARLSSON vs CBJ #1	WILLIAM KARLSSON	Center	71
2	6	1			0:19	19:41	STOP	PUCK IN BENCHES	WILLIAM KARLSSON	Center	71
3	7	1		EV	0:19	19:41	FAC	CBJ won Neu. Zone - VGK #71 KARLSSON vs CBJ #1	WILLIAM KARLSSON	Center	71
4	8	1		EV	0:27	19:33	SHOT	CBJ ONGOAL - #14 NYQUIST, Wrist, Off. Zone, 29	WILLIAM KARLSSON	Center	71
5	9	1		EV	0:30	19:30	BLOCK	CBJ #14 NYQUIST BLOCKED BY VGK #88 SCHMIDT, W	WILLIAM KARLSSON	Center	71
6	10	1		EV	0:52	19:08	SHOT	VGK ONGOAL - #19 SMITH, Snap, Off. Zone, 46 ft.	PAUL STASTNY	Center	26
7	11	1		EV	1:26	18:34	SHOT	VGK ONGOAL - #22 HOLDEN, Wrist, Off. Zone, 52 ft.	PAUL STASTNY	Center	26
8	12	1			1:27	18:33	STOP	GOALIE STOPPED (AFTER SOG)	PAUL STASTNY	Center	26
9	13	1		EV	1:27	18:33	FAC	VGK won Off. Zone - VGK #26 STASTNY vs CBJ #38	PAUL STASTNY	Center	26
10	14	1		EV	1:30	18:30	SHOT	VGK ONGOAL - #27 THEODORE, Wrist, Off. Zone, 5	PAUL STASTNY	Center	26
11	15	1		EV	1:31	18:29	SHOT	VGK ONGOAL - #26 STASTNY, Wrist, Off. Zone, 7 ft.	PAUL STASTNY	Center	26
12	16	1		EV	1:52	18:08	MISS	VGK #14 HAGUE, Wrist, Wide of Net, Off. Zone,	PAUL STASTNY	Center	26
13	17	1		EV	1:58	18:02	PENL	CBJ #77 ANDERSON Hooking(2 min), Def. Zone Dra	PAUL STASTNY	Center	26
14	18	1		SH	1:58	18:02	FAC	CBJ won Def. Zone - VGK #21 EAKIN vs CBJ #10 W	CODY EAKIN	Center	21
15	19	1		PP	2:35	17:25	GIVE	VGK GIVEAWAY - #71 KARLSSON, Off. Zone	CODY EAKIN	Center	21
16	20	1		SH	2:41	17:19	BLOCK	VGK #81 MARCHESSAULT BLOCKED BY CBJ #58 SAVAR	CODY EAKIN	Center	21