

Interference to WXOW-TV from WMTV-DT Construction
Permit and Proposed Modified Construction Permit

WXOWTV (19+) Lacrosse, WI
TV Incoming Interference Study
Signal Resolution: 1.5 km
Consider NTSC Taboo: Yes
KWX error points are considered to
be interference free coverage.
of radials computed for contours: 360
Contours calculated using 8 radial HAAT.
LR Profile Spacing Increment: 0.1 km
Interference considered within the
reference station's noise limited contour.
Threshold for reception: 62.262

Study Date: 2/23/2004
TV Database Date: 02-07-04

Population Database: 2000 US Census (SF1)

Percentages calculated using a baseline population of 304,152.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
KYIN-D.C (18)	1	0	0.000	3.99
WHO-DT.C (19)	1704	4088	1.344	541.81
WGN-DT.C (19)	0	0	0.000	2.00
KSMQ-D.C (20)	431	1131	0.372	167.25
WQOWTV (18Z)	687	1692	0.556	183.09
WMTV-D.C (19)	1957	4990	1.641	386.25
KBJR-D.C (19)	194	510	0.168	72.86
WHOTV-D (19)	1336	3171	1.043	366.01
WMTV-D (19)	1957	4990	1.641	386.25
KBJRTV-D (19)	80	229	0.075	29.54
WMTV-DTP (19)	2225	5634	1.852	449.75

Masking Summary:

Call Letters	Total Interference		Unique Interference	
	Population	%	Population	%
KYIN-D.C (18)	0	0.000	0	0.000
WHO-DT.C (19)	4088	1.344	721	0.237
WGN-DT.C (19)	0	0.000	0	0.000
KSMQ-D.C (20)	1131	0.372	685	0.225
WQOWTV (18Z)	1692	0.556	1163	0.382
WMTV-D.C (19)	4990	1.641	0	0.000
KBJR-D.C (19)	510	0.168	0	0.000
WHOTV-D (19)	3171	1.043	0	0.000
WMTV-D (19)	4990	1.641	0	0.000
KBJRTV-D (19)	229	0.075	0	0.000

WMTV-DTP (19) 5634 1.852 537 0.177

Stations considered which do not cause interference:

WGN-DT.C (19)
WLAX-D.C (17)
WHA-DT.C (20)
KYIN-D (18)
WGNTV-D (19)
KSMQTV-D (20)
WLAX-D (17)
WTHXTV-D (19)
WHATV-D (20)

Call Letters	City	State	Dist	Bear
KYIN-D.C (18)	Mason City	IA	127.8	248.3
WHO-DT.C (19)	Des Moines	IA	286.4	220.7
WGN-DT.C (19)	Chicago	IL	372.6	123.8
KSMQ-D.C (20)	Austin	MN	95.2	259.4
WLAX-D.C (17)	La Crosse	WI	0.5	238.5
WQOWTV (18Z)	Eau Claire	WI	110.7	356.0
WMTV-D.C (19)	Madison	WI	173.8	118.2
KBJR-D.C (19)	Superior	WI	336.6	350.2
WHA-DT.C (20)	Madison	WI	170.2	118.7
KYIN-D (18)	MASON CITY	IA	127.8	248.3
WHOTV-D (19)	DES MOINES	IA	288.1	220.4
WGNTV-D (19)	CHICAGO	IL	372.1	123.4
KSMQTV-D (20)	AUSTIN	MN	132.5	264.3
WLAX-D (17)	LA CROSSE	WI	0.4	238.9
WTHXTV-D (19)	MANITOWOC	WI	302.1	82.0
WMTV-D (19)	MADISON	WI	173.8	118.2
KBJRTV-D (19)	SUPERIOR	WI	336.6	350.2
WHATV-D (20)	MADISON	WI	170.2	118.7
WMTV-DTP (19)	Madison	WI	173.8	118.2

Totals for WXOWTV (19+)

Calculation Area Population:	328,083	(16664.4 sq. km)
Not Affected by Terrain Loss:	304,152	(15725.8 sq. km)
Total NTSC Interference:	1,692	(183.1 sq. km)
DTV Only Interference:	9,625	(1015.3 sq. km)
Total DTV Interference:	10,154	(1084.2 sq. km)
Interfered Population:	11,317	(1198.4 sq. km)
Interference Free:	292,835	(14527.4 sq. km)
Percent Interference:	3.72		

Terrain Blocked Population:	23,931	(938.6 sq. km)
Contour Area Population:	328,178		