

SIGN MAINTENANCE

Sign Installation: Signs will be installed and maintained to meet federal standards set forth in the most recent Manual on Uniform Traffic Control Devices (MUTCD).

Maintain Signing, Overall Responsibility: University Heights sign maintenance practices are established to meet all requirements and provide appropriate signing for the traveling public.

Sign Retro-Reflectivity: In accordance with the Second Edition of the 2003 MUTCD – Section 2A.09, the City of University Heights has adopted a traffic sign management plan that is a combination of the “Expected Sign Life” management plan and the “Blanket Replacement” management plan described in the MUTCD. To address new signs that are constructed in conjunction with construction projects, a blanket replacement approach has been developed but will be supplemented by an expected sign life approach to avoid the unnecessary replacement of traffic signs that had been constructed during a particular zone’s sign life period.

1. Blanket Replacement Sign Management
 - a. University Heights has been divided into six zones for the purpose of maintaining traffic signage. Refer to the attached Traffic Sign Maintenance Program map for details on the zone locations.
 - b. New traffic signs that are installed in University Heights include Type IV High Intensity Prismatic sheeting, which results in a 12-year expected sign life. Therefore, a maximum 12-year replacement period was used to develop the planned replacement of signs in each zone.
2. Expected Sign Life Management
 - a. When new signs are installed, the installation date will be recorded in the GIS sign database so that the age of the sign is known.
 - b. New traffic signs that are installed in University Heights include Type IV High Intensity Prismatic sheeting, which results in a 12-year expected sign life.
 - c. During the scheduled replacement of traffic signs within a particular zone, if there are traffic signs that are newer than 6-years old, those signs will not be replaced.

The GIS traffic sign database will be reviewed periodically to determine which, if any, signs need to be replaced in the following calendar year so that funding can be identified to accommodate the replacements.

Sign Maintenance Responsibility: Maintain signs and street identification signs on all University Heights public streets, with the exception of specific signs installed by others (transit agencies, building identification signs, etc)

Miscellaneous Sign Practices:

1. The City Council and City Engineer oversee the traffic signage throughout University Heights. Traffic sign data collection is completed by the Metropolitan Planning Organization of Johnson County or by the City Engineer. Traffic sign installation is completed by hired contractor forces.
2. Traffic signs will be reviewed for removal or modification as necessary per the MUTCD guidelines.

Traffic Sign Maintenance

2012 - 2013	Replace all "poor" condition signs	✘
2014 - 2015	Replace all "fair" condition signs	✘
2012 - 2015	Provide maintenance to all signs in need of height or other corrections	
2029 +	Scheduled Sign Replacement	✘

Traffic Sign Maintenance Program
University Heights

Long Term Traffic Sign Replacement Matrix

Sign maintenance program established (2013-2016)
Retroreflectivity requirements met for all regulatory and warning signs (2016-2020)

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
ZONE 1	Regulatory Warning		✘		✘												✘						
ZONE 2	Regulatory Warning		✘		✘												✘						
ZONE 3	Regulatory Warning		✘		✘												✘						
ZONE 4	Regulatory Warning			✘		✘												✘					
ZONE 5	Regulatory Warning			✘		✘												✘					
ZONE 6	Regulatory Warning			✘		✘												✘					

2012 - 2015

Sign Replacement Plan (Corrective Action Needed)

Field	TYPE	CONDITION	HEIGHT TOP	HEIGHT BOTTOM	POST	POST CONDITION	COMMENTS	ZONE
1	No Outlet	Fair	7.67	4.25	Telspar	Fair	Vegetation blocking post post leans	6
2	Glencrest Dr	Fair	9.08	8.58	Round	Fair	Vegetation blocking post	6
21	Speed Limit 25	Fair	8.67	6.67	Telspar	Fair	Post leans	3
33	Dead End	Poor	8.25	4.08	Telspar	Fair	Bent Sign	6
45	Speed Limit 20	Fair	10.17	8.17	Telspar	Fair	Post easily moves	6
59	Stop	Fair	8.50	6.00	Telspar	Good	Tree Branches in way of sign	6
69	Object Marker, OM3-R	Poor	6.00	3.00	Telspar	Fair	Bent Sign	6
76	Sunset St	Poor	9.33	8.08	Round	Good	Shares post with 77_Bent Sign	2
77	Melrose Ave	Poor	8.08	8.33	Round	Good	Shares post with 76_Bent Sign	2
78	Stop	Good	8.58	5.08	Telspar	Good	Post leans	2
80	Birkdale Ct	Fair	9.42	8.08	Telspar	Good	Shares post with 81_Bent Sign	2
121	Dead End	Poor	5.00	2.33	Telspar	Good	In a Tree	3
155	Koser St	Fair	9.33	8.08	Telspar	Good	Shares post with 156_Sign is Loose	3
156	Leamer Ct	Fair	8.08	7.33	Telspar	Good	Shares post with 155_Sign is Loose	3
175	Koser St	Fair	9.00	8.50	Round	Good	Shares post with 176_Leans	4
202	Speed Limit 20	Fair	8.08	6.08	Telspar	Fair	Shares post with 203_Tree Branch	5
214	Highland Drive	Poor	8.08	8.33	Telspar	Fair	Shares post with 215_Sign Leans	1
215	Sunset St	Good	8.33	7.08	Telspar	Fair	Shares post with 216_sign leans	5
249	Dead End	Fair	7.50	4.08	Telspar	Poor	Post Leans_shares post with 248, 250	4
278	Koser St	Fair	9.75	9.25	Round	Fair	Sign leans_shares post with 279	1
350	Mehaska Dr	Fair	8.42	7.08	Telspar	Fair	Wobbly_Shares post with 351, 352	1
351	Highland Drive	Fair	7.08	7.42	Telspar	Fair	Wobbly_shares post with 350, 352	1
394	School Crossing	Good	10.17	7.08	Telspar	Good	Tree Branch_shares post with 395	1
402	Weight Limit 11 tons GVWR	Good	9.08	7.33	Telspar	Good	Leans	5
Total Number of Signs =24								

2012 - 2013

Sign Replacement Plan (Poor Condition)

Field	TYPE	CONDITION	HEIGHT TOP	HEIGHT BOTTOM	POST	POST CONDITION	COMMENTS	ZONE
13	Dead End	Poor	9.25	6.50	Telspar	Fair		6
27	One Way	Poor	7.00	5.08	Telspar	Good		3
33	Dead End	Poor	8.25	4.08	Telspar	Fair	Bent Sign	6
43	Stop	Poor	4.67	2.17	Telspar	Poor		6
44	(Object Marker, OM3-L)	Poor	7.08	4.08	Telspar	Fair		6
56	Speed Limit 20	Poor	8.75	6.75	Telspar	Good		6
68	Road Closed	Poor	5.08	2.08	Telspar	Poor		6
69	(Object Marker, OM3-R)	Poor	9.00	3.00	Telspar	Fair	Bent Sign	6
75	Speed Limit 20	Poor	7.75	5.75	Telspar	Good		2
76	Sunset St	Poor	9.33	8.08	Round	Good	shares post with 77_Bent Sign	2
77	Melrose Ave	Poor	8.08	8.33	Round	Good	shares post with 76_Bent Sign	2
84	Speed Limit 25	Poor	9.08	7.33	Telspar	Poor		2
88	Speed Limit 25	Poor	9.00	6.50	Telspar	Fair		2
92	Stop	Poor	8.75	6.25	Telspar	Poor		2
96	Speed Limit 25	Poor	8.33	5.08	Telspar	Fair		2
118	No Left Turn	Poor	9.50	7.00	Telspar	Fair		3
121	Dead End	Poor	5.00	2.33	Telspar	Poor	In a Tree	3
182	Speed Limit 20	Poor	8.50	6.50	Telspar	Good		4
209	Speed Limit 25	Poor	8.67	6.17	Telspar	Poor	shares post with 210	3
211	Stop	Poor	8.75	6.25	Telspar	Fair		3
212	Speed Limit 25	Poor	7.75	5.25	Telspar	Fair		5
214	Highland Drive	Poor	8.08	8.33	Telspar	Fair	shares post with 215_Sign Leans	1
240	Weight Limit 11 tons	Poor	10.08	7.58	Telspar	Fair	shares post with 241, 242	4
253	Diamond Reflector	Poor	2.00	0.00	Chain	Poor		4
255	Yellow on Black	Poor	2.50	0.00	Chain	Poor		4
302	Stop	Poor	7.08	5.50	Telspar	Fair	shares post with 303	1
303	All way	Poor	5.50	5.00	Telspar	Fair	shares post with 302	1
304	Stop	Poor	9.75	7.25	Telspar	Good		1
342	Monroe St	Poor	7.08	7.33	Telspar	Good	shares post with 341	1
356	Stop	Poor	9.08	6.58	Telspar	Good	shares post with 357	1
385	Stop	Poor	10.00	7.50	Telspar	Good	shares post with 384	1
419	Speed Limit 20	Poor	8.25	6.25	Telspar	Fair	shares post with 418	5
421	Stop	Poor	7.08	5.42	Telspar	Fair	shares post with 422	5
434	No Outlet	Poor	10.50	8.00	Telspar	Good		4
447	4 Way	Poor	6.17	5.67	Telspar	Good	shares post with 446	4
455	Speed Limit 20	Poor	10.17	8.17	Telspar	Fair	shares post with 456	4
Total Number of Signs = 36								

2014 - 2015
Sign Replacement Plan (Fair Condition)

FIELD	TYPE	CONDITION	HEIGHT TOP	HEIGHT BOTTOM	POST	POST CONDITION	COMMENTS	ZONE
1	No Outlet	Fair	7.67	4.25	Telspar	Fair	vegetation blocking post post leans	6
2	Glencrest Dr	Fair	9.08	8.58	Round	Fair	vegetation blocking post	6
15	Grand Ave	Fair	9.50	9.00	Round	Fair	shares post with 16	6
16	Golfview St	Fair	9.00	8.50	Round	Fair	shares post with 15	6
21	Speed Limit 25	Fair	8.67	6.67	Telspar	Fair	post leans	3
22	Keep Right	Fair	8.75	7.00	Telspar	Good		3
28	Yield	Fair	9.00	7.50	Telspar	Good	shares post with 29_back-to-back	3
29	Do Not Enter	Fair	9.00	7.50	Telspar	Good	shares post with 28_back-to-back	3
42	(Object Marker, OM3-R)	Fair	6.25	3.25	Telspar	Poor		6
45	Speed Limit 20	Fair	10.17	8.17	Telspar	Fair	Post easily moves	6
59	Stop	Fair	8.50	6.00	Telspar	Good	shares post with 472_Tree Branches in way of sign	6
60	Dead End	Fair	8.25	4.08	Telspar	Fair	Wall right against sign	6
66	No Dumping	Fair	8.00	6.00	Telspar	Poor	Post leans badly	6
74	Slow Children At Play	Fair	8.58	6.58	Telspar	Fair	shares post with 475	2
80	Birkdale Ct	Fair	9.42	8.08	Telspar	Good	shares post with 81_Bent Sign	2
87	Bus Stop	Fair	6.33	4.33	Telspar	Fair		2
93	Dead End	Fair	9.17	5.75	Telspar	Poor		2
100	Speed Limit 25	Fair	10.17	6.67	Telspar	Good	shares post with 101	2
104	Speed Limit 25	Fair	8.17	6.17	Telspar	Fair		2
105	Bus Stop	Fair	9.42	7.42	Telspar	Good		2
107	George St	Fair	9.83	9.33	Telspar	Fair	shares post with 106	2
116	Speed Limit 25	Fair	9.50	7.50	Telspar	Fair	shares post with 117	3
120	Center Turn Lane Only	Fair	8.50	6.50	Telspar	Good		3
133	Speed Limit 25	Fair	8.50	6.00	Telspar	Fair		2
150	Stop	Fair	7.50	5.00	Telspar	Good		3
152	Speed Limit 20	Fair	8.25	6.25	Telspar	Fair		3
153	Stop	Fair	8.75	6.25	Telspar	Fair	shares post with 154	3
155	Koser St	Fair	9.33	8.08	Telspar	Good	shares post with 156_Sign is Loose	3
156	Leamer Ct	Fair	8.08	7.33	Telspar	Good	shares post with 155_Sign is Loose	3
174	Stop	Fair	9.00	6.50	Telspar	Fair		4
175	Koser St	Fair	9.00	8.50	Round	Good	shares post with 176_Leans	4
176	Highland Drive	Fair	8.50	8.00	Round	Good	shares post with 175	4
180	Stop Ahead (warning sign)	Fair	9.08	6.42	Telspar	Good	shares post with 181	4
186	Stop	Fair	7.08	5.50	Round	Fair		4
188	No Outlet	Fair	9.67	6.25	Telspar	Fair	shares post with 189	4
192	Horizontal Object Marker (OM3)	Fair	4.17	3.17	Telspar	Fair	post structure, shares with 193, 194	2
193	Horizontal Object Marker (OM3)	Fair	4.33	3.33	Telspar	Fair	post structure, shares with 192, 194	2
194	Horizontal Object Marker (OM3)	Fair	4.08	3.08	Telspar	Fair	post structure, shares with 192, 193	2
195	Stop	Fair	7.75	5.25	Telspar	Good	shares post with 196	5
197	Speed Limit 20	Fair	8.33	6.33	Telspar	Fair	shares post with 198	5
202	Speed Limit 20	Fair	8.08	6.08	Telspar	Fair	shares post with 203_Tree Branch	5
204	Koser St	Fair	10.00	9.50	Round	Good	shares post with 205	2
205	Sunset St	Fair	9.50	9.00	Round	Good	shares post with 204	2

2014 - 2015
Sign Replacement Plan (Fair Condition)

FIELD	TYPE	CONDITION	HEIGHT TOP	HEIGHT BOTTOM	POST	POST CONDITION	COMMENTS	ZONE
206	Stop	Fair	9.50	7.00	Telspar	Good		2
213	Stop	Fair	8.08	6.42	Telspar	Fair		5
216	speed limit 20	Fair	7.50	5.50	Telspar	Good	shares post with 217, 218	5
225	Speed Limit 20	Fair	7.67	5.67	Telspar	Fair	shares post with 226	5
229	Stop	Fair	9.00	6.50	Telspar	Good	shares post with 229	5
233	Stop	Fair	8.17	5.67	Telspar	Fair	shares post with 234	4
234	All way	Fair	5.67	5.17	Telspar	Fair	shares post with 233	4
235	Speed Limit 20	Fair	10.00	8.00	Telspar	Good	shares post with 236	5
237	Stop	Fair	7.75	5.25	Telspar	Fair		4
238	Speed Limit 20	Fair	8.67	6.67	Telspar	Fair		4
249	Dead End	Fair	7.50	4.08	Telspar	Poor	Post Leans_ shares post with 248, 250	4
251	Yellow on Black	Fair	7.67	4.67	Telspar	Poor	behind utility pole	4
254	Diamond Reflector	Fair	6.50	4.50	Telspar	Fair		4
260	Right Curve	Fair	8.08	4.67	Telspar	Fair	shares post with 261	4
278	Koser St	Fair	9.75	9.25	Round	Fair	sign leans_shares post with 279	1
293	Stop	Fair	8.17	5.67	Telspar	Good	shares post with 294	1
294	All way	Fair	5.67	5.17	Telspar	Good	shares post with 293	1
296	Oakcrest	Fair	9.25	8.75	Round	Fair	shares post with 295	1
307	School Zone 20 Mph 8 to 5	Fair	6.50	4.50	Telspar	Fair		1
308	Ped Crossing	Fair	9.00	7.00	Telspar	Fair	shares post with 309	1
311	Oakcrest	Fair	9.50	9.00	Round	Fair	shares post with 312	1
341	Oakcrest	Fair	8.33	7.08	Telspar	Good	shares post with 342	1
350	Mehaska Dr	Fair	8.42	7.08	Telspar	Fair	Wobbly_Shares post with 351, 352	1
351	Highland Drive	Fair	7.08	7.42	Telspar	Fair	Wobbly_shares post with 350, 352	1
366	Mahaska Dr	Fair	9.58	9.08	Round	Fair	shares post with 367	1
367	Oakcrest	Fair	9.08	8.58	Round	Fair	shares post with 366	1
383	School Zone 20 Mph 8 to 5	Fair	5.58	3.58	Telspar	Fair	shares post with 382	1
392	Bus Stop	Fair	7.67	5.67	Telspar	Good		1
397	Bus Stop	Fair	9.17	7.17	Telspar	Poor		1
400	Speed Limit 25	Fair	10.67	8.17	Telspar	Fair		5
401	Neighborhood Watch	Fair	8.00	6.50	Telspar	Fair		5
403	Welcome to the City of Universit	Fair	8.08	6.08	Telspar	Fair	shares post with 404	5
408	Stop	Fair	8.58	6.08	Telspar	Fair		5
410	Speed Limit 20	Fair	9.75	7.75	Telspar	Good	shares post with 411	5
422	4 Way	Fair	5.33	4.08	Telspar	Fair	shares post with 421	5
435	Stop	Fair	9.33	6.08	Telspar	Fair	shares post with 436	4
436	4 Way	Fair	6.75	6.50	Telspar	Fair	shares post with 435	4
440	Speed Limit 20	Fair	9.33	7.33	Telspar	Fair	shares post with 441	4
446	Stop	Fair	8.75	6.25	Telspar	Good	shares post with 447	4
450	Stop	Fair	8.00	5.50	Telspar	Fair	shares post with 451	5
451	4 Way	Fair	5.33	4.08	Telspar	Fair	shares post with 450	5
454	Stop Ahead	Fair	8.00	5.50	Telspar	Fair		5
Total Number of Signs = 85								

University Heights - Sign Management Program

Sign Totals by Type and Zone

	Regulatory	Warning	Street	Total
Zone 1	19	17	21	57
Zone 2	13	6	8	27
Zone 3	18	6	10	34
Zone 4	15	11	4	30
Zone 5	19	1	6	26
Zone 6	7	9	7	23
Total	91	50	56	197

