

Langdon Walkability Assessment

Final Report

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Cavalier County Health District

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INTRODUCTION

A community may be designated walkable if it is easy as well as safe for the pedestrians to walk about (to school, stores, parks, post office etc.) Additionally, a walkable community is such that encourages safe usage of existing infrastructure while expanding transportation options for users with varied ranges of mobility.

The Cavalier County Health District (CCHD) has requested that Upper Great Plains Transportation Institute (UGPTI) at North Dakota State University (NDSU) conduct a Walkability Assessment in Langdon, ND. The purpose of this assessment is to bring all the stakeholders together and to try and identify the problems facing the community of Langdon when it comes to walking about in the area.

SITE SELECTION

At the request of CCHD, the sidewalks/crosswalks around 3-block area from Langdon Area High School in the north to Langdon Elementary School in the south were selected for assessment. The area also includes part of Langdon City Park and Langdon Day Care Center.

ASSESSMENT TOOL

The Walkability Checklist from www.pedbikeinfo.org was used as an assessment tool. A brief training was provided prior to the site visit/assessment. The training included background information regarding the checklist and also detailed information regarding the rating scale used in the assessment. The checklist includes the following main questions:

1. Did you have room to walk?
2. Was it easy to cross streets?
3. Did drivers behave well?
4. Was it easy to follow safety rules?
5. Was your walk pleasant?

Each of these questions includes a rating from 1 to 6 categorized as below:

1. Awful
2. Many Problems
3. Some Problems
4. Good
5. Very Good
6. Excellent

The corresponding total ratings add up to a range of 5-30 as classified below:

- | | |
|------------|---|
| 1. 26 – 30 | Celebrate! You have a great neighborhood for walking. |
| 2. 21 – 25 | Celebrate a little. Your neighborhood is pretty good. |
| 3. 16 – 20 | Okay, but it needs work. |
| 4. 11 – 15 | It needs a lot of work. You deserve better than that. |
| 5. 5 – 10 | It's a disaster for walking! |

SITE VISIT/ASSESSMENT

The training, site visit and assessment were completed on August 8, 2016. The assessment started at the High School and looped around the 3-block area. The checklists were completed post assessment. The participants also provided written comments. The comments covered issues included those identified during the assessment and those observed at other times of the year (especially when schools are in session).

OBSERVATIONS

A person was observed jogging/running around the park and the high school area. As can be seen in images below, a sidewalk was not available to them for a continuous run and hence they were using pavement for running.



Figure 1. No sidewalk on the north side of high school



Figure 2. No sidewalk on the west side of high school



Figure 3. No sidewalk on the east side of elementary school

At multiple locations, ramps were missing at the end of the crosswalk as can be seen in images below.



Figure 4. Ramp missing at the end of crosswalk at southwest corner of high school



Figure 5. Ramp missing at the end of crosswalk at southeast corner of high school



Figure 6. Ramp missing at the crosswalk connecting the park and the daycare center

At multiple locations, poles blocked the sidewalk as seen in image below.

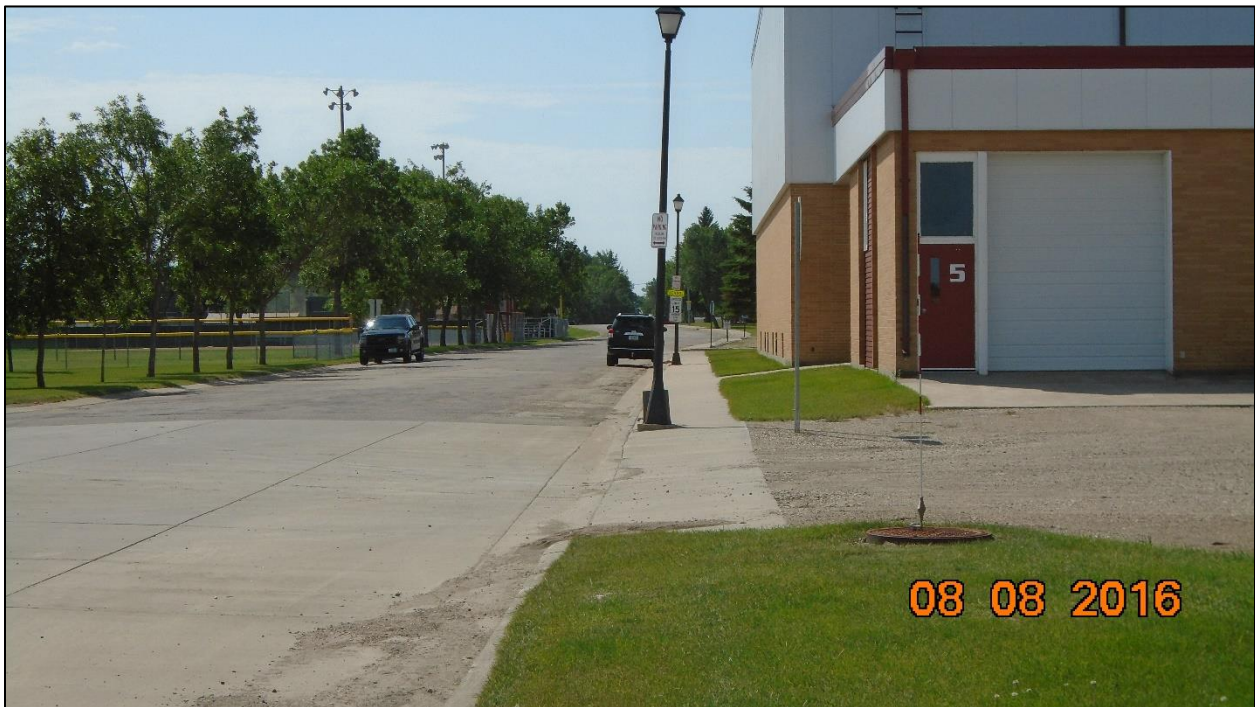


Figure 7. Streetlight poles blocking sidewalk on the east side of high school

Sidewalks started and stopped along the way as can be seen in image below.



Figure 8. Sidewalk started and stopped across driveways leading to the parking lot south of high school

At some locations, ramps led into unmarked crosswalks or no parking zones as can be seen in images below.

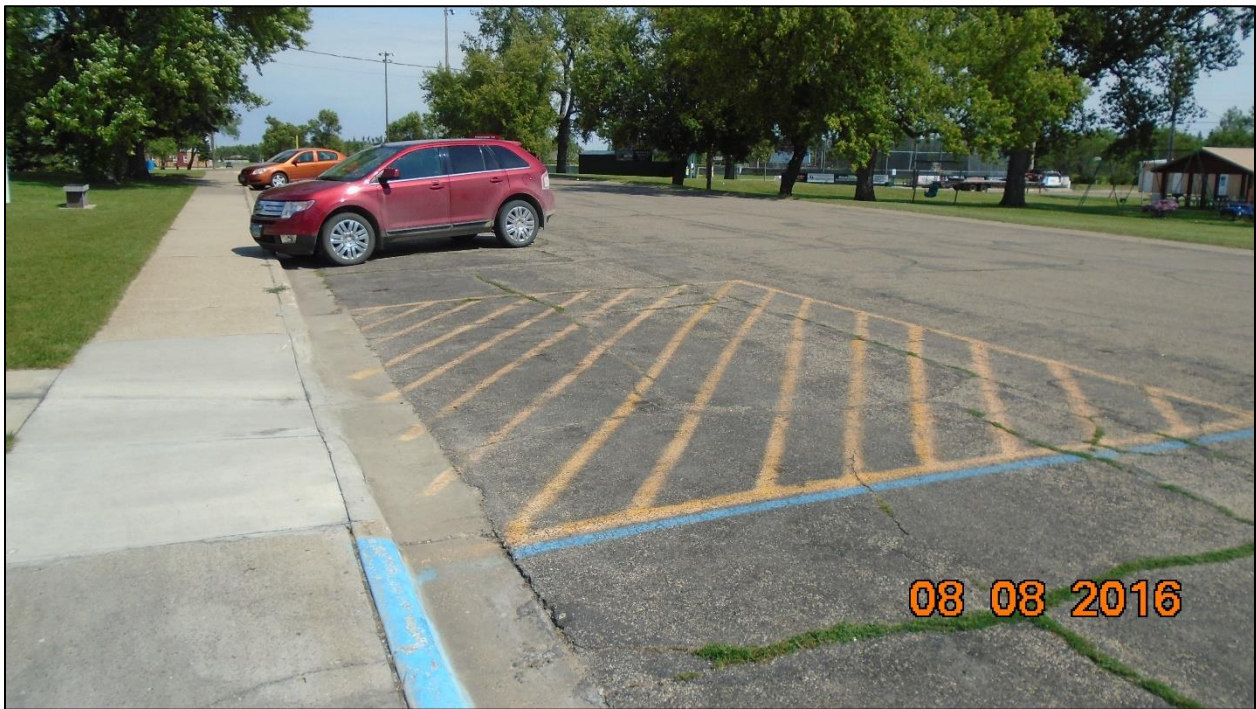


Figure 9. Ramp leading to a no parking zone on the west side of the park.

Pavement markings had faded at most locations and were barely visible at some locations as shown in images below.



Figure 10. Faded pavement marking at northeast corner of elementary school



Figure 11. Another faded pavement marking at northeast corner of elementary school

Sidewalks (along with adjoining curb/gutter and pavement surfaces) at some locations were found to be in general state of disrepair and had debris/gravel strewn in certain sections as can be seen in image below.



Figure 12. Gravel on sidewalk at the west side of elementary school



Figure 13. Heaved sections of sidewalk on the west side of park.

At least one location showed signs of heaving due to roots of nearby trees as shown in image above.

ASSESSMENT RESULTS

Most of the attendees rated the area between 15 and 18 as can be seen in chart below.

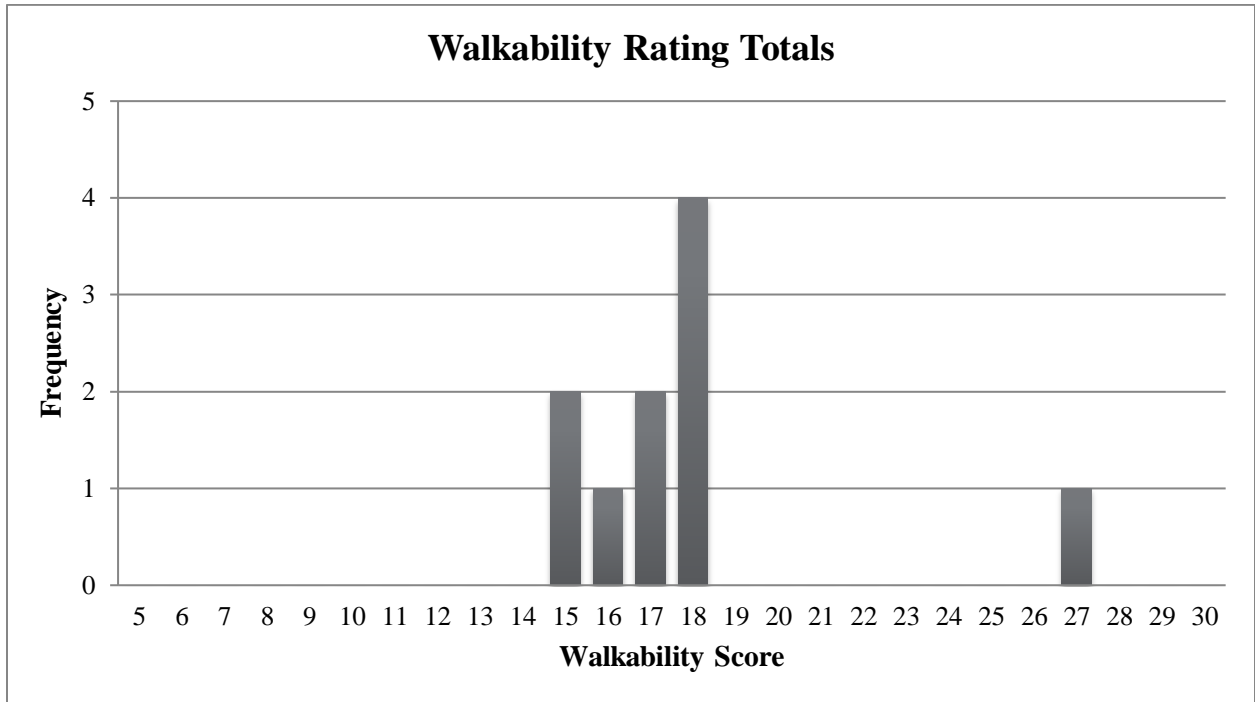


Figure 14. Walkability rating frequency chart

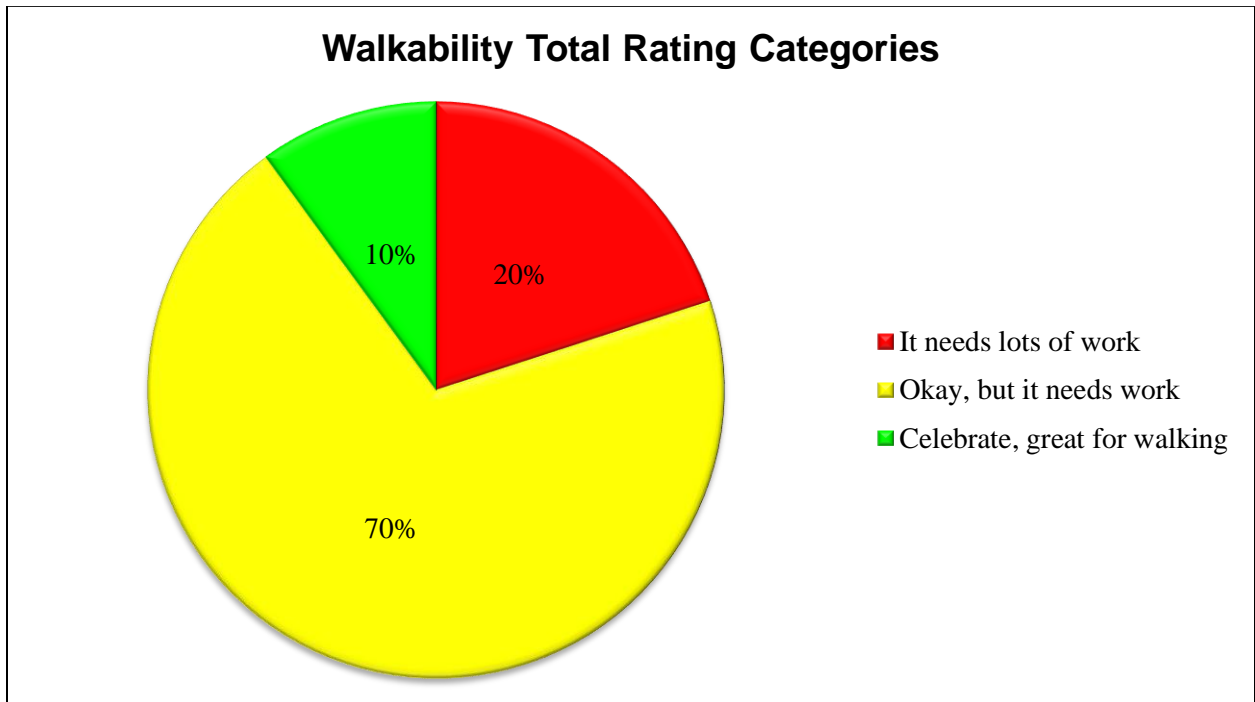


Figure 15. Walkability total rating categories

These ratings led to most of the responses to land in the “Okay, but it needs work” and “It needs lots of work” categories as shown in pie chart above.

No aggressive driver behavior was observed and the walk was otherwise pleasant. This is seen in the figure below as the corresponding questions are rated between 4 (good) and 6 (excellent). However, as expected, the other questions regarding infrastructure etc were rated between 1 (awful) and 4 (good).

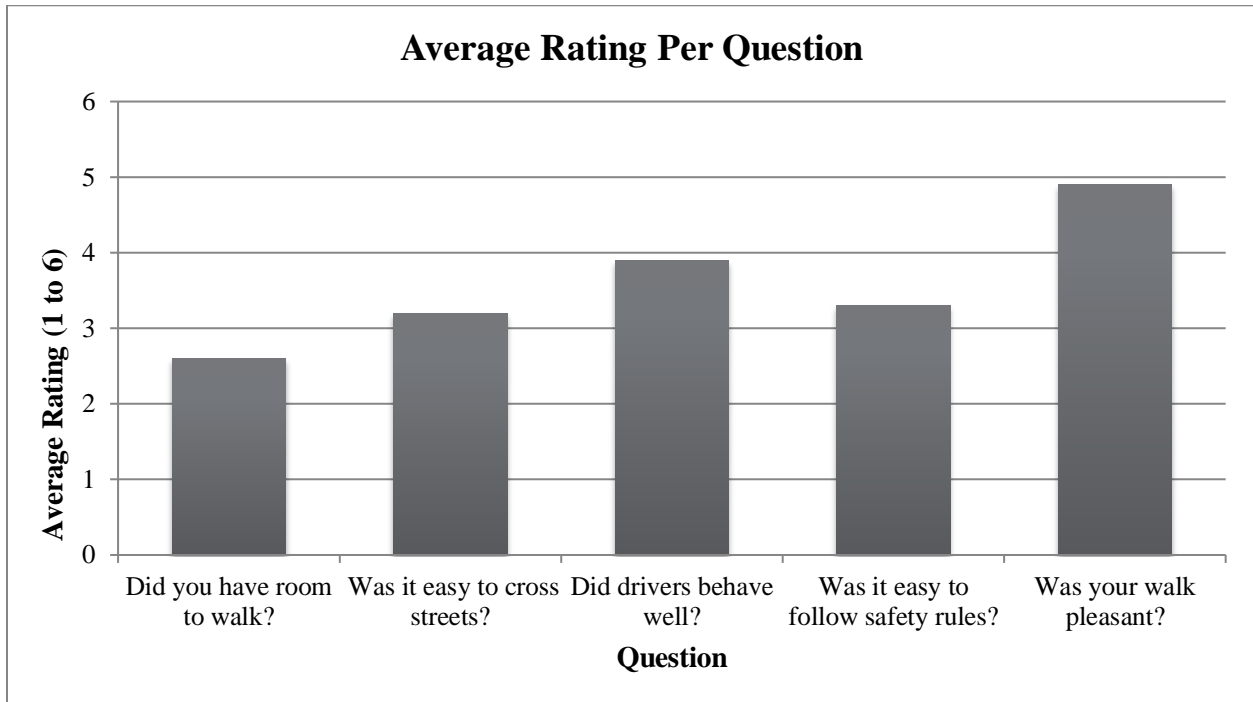


Figure 16. Average rating per assessment question

The attendees reported problems with existing infrastructure including cracked concrete, absence of sidewalks, blockages etc. The issues that were reported the most are shown in the chart below.

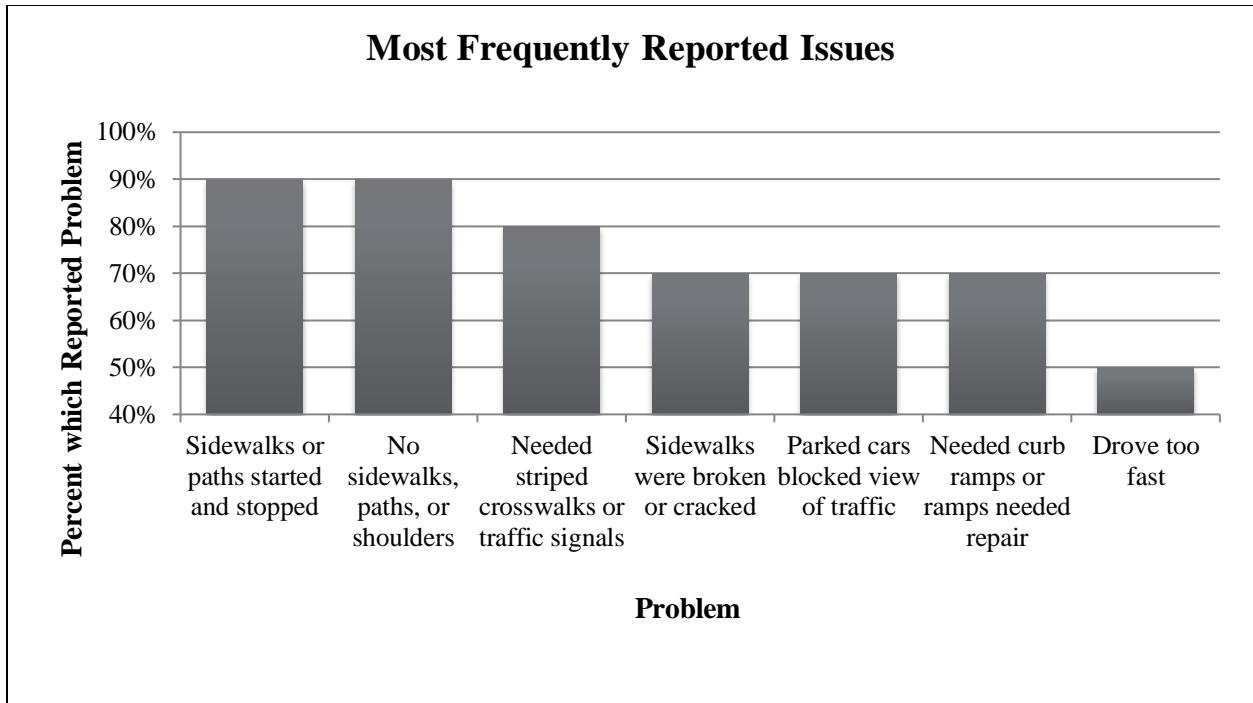


Figure 17. Most frequently reported issues

RECOMMENDATIONS

It is unfortunate that issues with infrastructure are rampant in the area observed. It is recommended that agencies with jurisdiction/control over respective sections look into opportunities in the near future to improve their facilities. Innovative approach to funding any improvement projects may be necessary in case current funding sources are found to be inadequate.

Further engineering study to identify countermeasures and improvement alternatives as well as corresponding cost estimates is also recommended.

REFERENCES

Walkability Checklist. (n.d.). Retrieved August 1, 2016, from http://www.pedbikeinfo.org/cms/downloads/walkability_checklist.pdf

APPENDIX

Appendix

Comments

1. Did you have room to walk?
 - Park better than schools and daycare (schools especially elementary need sidewalks)
 - No sidewalk around east and south part of elementary school
 - Sidewalks are in bad need of repair due to cracks and crumbling
 - No sidewalks on east side of street by ball field and daycare
 - No ramps on 1 sidewalk
2. Was it easy to cross streets?
 - Daycare needs safer crossing, crosswalks need to be painted
 - Need curb drops
 - More crosswalks needed around schools, park, pool, and daycare
 - Need more curb ramps – only a few were found on walk
 - Speed bumps for traffic
 - Need higher sidewalks by daycare
 - Some roads in poor condition to walk and no sidewalks
3. Did drivers behave well?
 - Did not see many drivers while on walk
 - No yield to pedestrian signs
 - When school starts, drivers drive too fast past daycare
 - Speeding past daycare
 - Child play area not marked
4. Was it easy to follow safety rules?
 - Cross walks not marked well
 - No street lights
 - Need more crosswalks
5. Was your walk pleasant?
 - Mosquitoes
 - Rocks on elementary school sidewalk and west of park
 - Would like to see more light by park
 - Would like to see less gravel on some sidewalks
 - Fence by elementary school is dangerous on bottom
 - Pleasant day, clean area
6. Other
 - Would like to see crosswalks (also signs) by the baseball diamonds and football field
 - Would like to see sidewalks on all sides of both schools, especially the south and east elementary school
 - Park is very attractive – trees, shade, play structures
 - Sweep rocks off of sidewalks at the elementary school and west park sidewalk
 - Curb cuts on all sidewalks needed
 - Increased lighting at the park for evening walking
 - Continued open use policy for track, elementary school playground
 - Speed bumps?
 - Would love to see speed bumps and pedestrian crossings signs around the area we walked

Appendix

- Several areas around schools are missing sidewalk
- Several corners are missing curb declines/drops
- No cross walk to track
- Recommend distance signs so walkers know how far a loop is (ex. 4 lap around track = 1 mi, 1 lap around school/park = ?)
- Police presence to curb speeding traffic
- Daycare crosswalk needs to be better marked to increase visibility
- All crosswalks need to be better marking
- Lighting around park is questionable
- Recommend winter assessment in addition
- Would like to see a fence by the park area that has no sidewalk, north of daycare
- Continuous sidewalk in entire assessed area would be nice
- Rural North Dakota winters are not only tough on condition but also not visible for use during an average 5 months of the year, I believe this leads to property owners not wanting to spend money on something they can't use or may deteriorate prematurely
- In a perfect world everything would be perfect. Money is what drives all of this. Without funding things don't get done.