Public Outreach for the 2022-2023 Street Maintenance Plan

July 18, 2022
New Braunfels Street System

The City maintains 358 centerline miles containing 913 lane miles.

- 20 lane miles added in 2016
- 12 lane miles added in 2017
- 28 lane miles added in 2018
- 20 lane miles added in 2019
- 20 lane miles added in 2020
- 24 lane miles added for 2021
Pavement Section

- Asphalt Surface
- Base Material
- Subgrade
Pavement Condition Index

**PAVEMENT CONDITION INDEX**

- **Excellent**
- **Good**
- **Fair**
- **Poor**
- **Very Poor**
- **Failed**

**AGE OF PAVEMENT**

- 40% drop in quality
- 75% of life
- 12% of life

**Reactive Maintenance**
- Results will vary based on PCI
- Will Cost $12.00 to $16.00 for Rehabilitation Here

**$2.00 for PP Here**

**$4.00 for RM Here**

**PP = Pavement Preservation  RM = Reactive Maintenance**
Maintenance Strategies

Preventative Maintenance

- Crack Seal
- Potholes & NBU Street Repairs - Application of hot mix asphalt (HMA) to smooth roadway and remove rutting.
- Level-Up and Thin Overlay – 1” HMA
- Micro Surfacing – 1/4” HMA

Mill and Overlay

- Mill and overlay - spot base repair, mill existing asphalt to level surface and asphalt overlay. Typically 2” is milled out and repaved.

Rehabilitation

- Mill or pulverize asphalt surface, stabilize subgrade, add base, and add a 2” of hot mix asphalt overlay at existing grade.
Functional Classifications

Local

• Most common type of street in a city, and provides direct access to adjacent land. Carries no thru movement and parking is allowed.

• Design speed: 20 – 30 mph.
Functional Classifications

Collector

• Are the second most common type of road with a balance between access and mobility with parking allowed.

• Design speed: 30 – 40 mph.

Example: Hanz Drive
Functional Classifications

Arterial

• Provide the fastest path of travel for long distances. Are typically much wider with more lanes and no parking.

• Design speed: 45 – 50 mph.

Example: Walnut Avenue
Street Plan Determination

1) Pavement Management Software System
   • Inventory the pavement Overall Condition Index (OCI) from 1-100 (1 = worst)
   • Recommendations from Cartegraph

2) Field Verification
   • City staff visually inspects streets

3) Traffic Utilization
   • Types of Streets (ex. Collector)
Street Plan Determination

4) Coordination with Utilities
   • Timing our repairs with planned utility street cuts and improvements

5) Appropriate Maintenance and Repair Strategies

6) Citizen Input
   • During the year
   • Public Outreach

7) City Council Approval
Overall Condition Index: 100

- Considered excellent
- Include newly constructed or recently overlaid roads that require no maintenance
Overall Condition Index: 79

- Considered good to very good and in structurally sound condition
- Initial signs of aging, such as longitudinal and transverse cracking, slight raveling and an occasional pothole requiring patching
Overall Condition Index: 59

- Considered in average condition
- Roads show signs of needing resurfacing
- Over 50% of the surface has block cracking
- Streets in this condition could require rehabilitation
Overall Condition Index: 39

- Considered fair
- Could require rehabilitation or reconstruction
Overall Condition Index: 19

• Condition is considered poor to failed

• Requires reconstruction of base and surface
Next Steps

• Receive Public input (July 18th meeting and online survey)

• Evaluate to develop the 2022-2023 proposed street maintenance plan

• Present to City Council for approval in Fall 2022
**Links**

Tonight’s Meeting - Online Survey:
http://nbtexas.org/streets

Submitting a Pavement Concern:
http://www.nbtexas.org/284/Streets-Drainage

Viewing OCI Map and Road Closure Map:
https://www.nbtexas.org/1847/Pavement-Management-Program