

# Road Plan 101

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Budget Committee 9/16/25

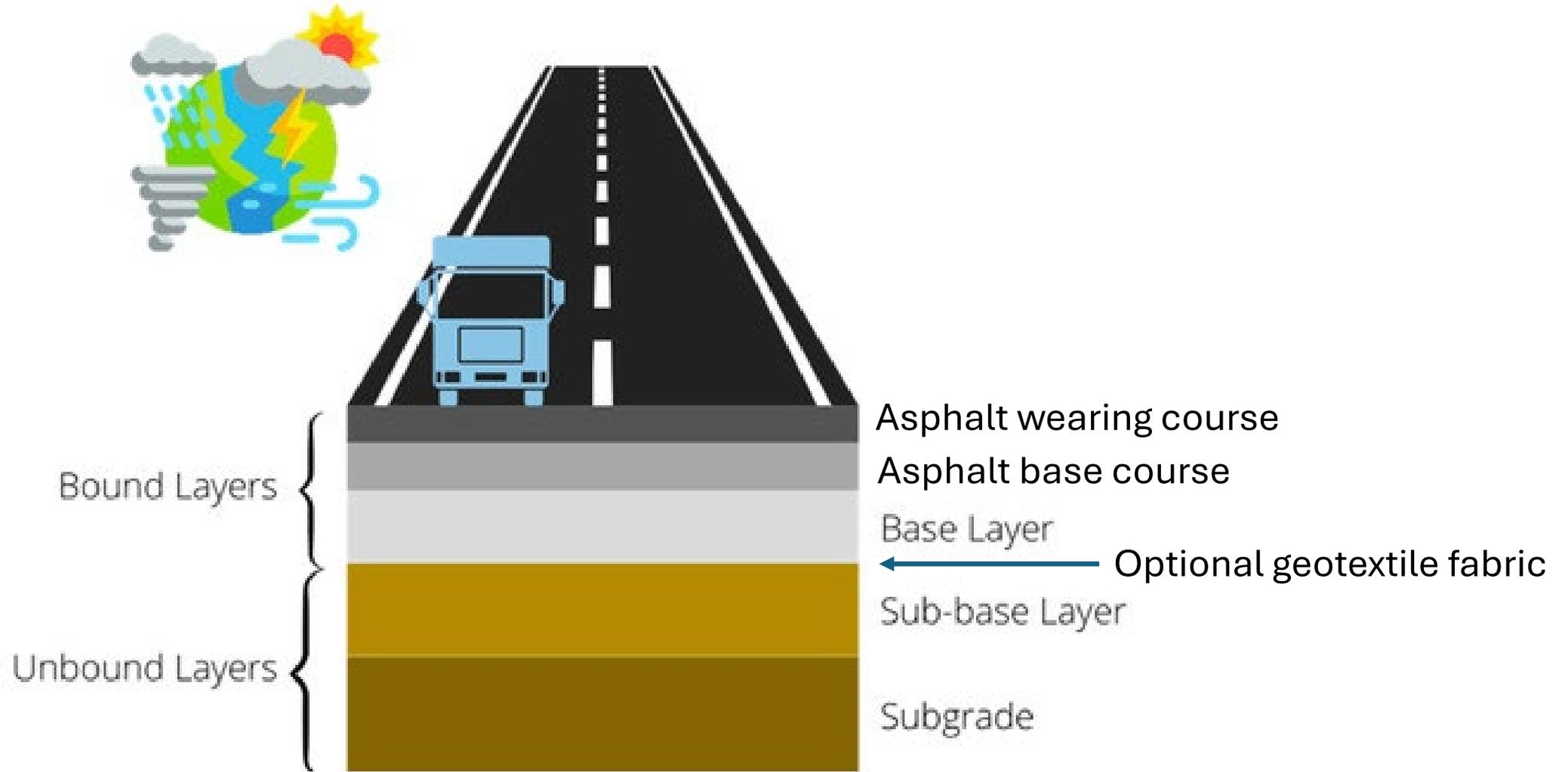
# Goffstown Roads – By the numbers

- 260 lane-miles of roadway (~equiv. to 130 centerline miles)
  - 560+ individual street segments (typically intersection to intersection)
  - Includes the Urban Compact sections of NH-114 and NH-13
  - Publicly-maintained gravel and “farm” roads
  - Does NOT include private roads or Class 6 (unmaintained) public “roads”
- 13.5 miles of sidewalk
- 18 bridges
- 430,000+ feet of drainage pipe and thousands of related inlets and manholes
- 2025 Budget (reclaim+resurfacing): \$1.65M as approved by voters

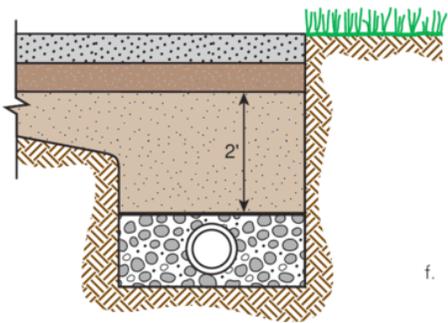
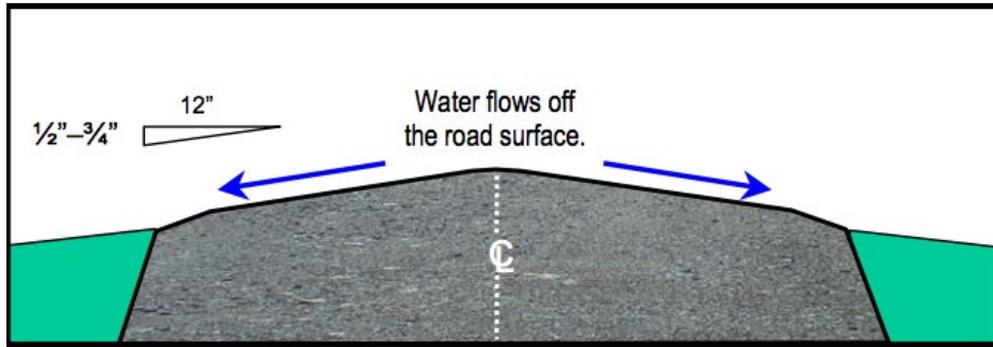
# General Categories of Roads

- **Arterial/Main (5000+ average daily trips)**
  - NH-114, Mast Rd, Elm St, Center St, Goffstown Back Rd, Shirley Hill Rd, Daniel Plummer Rd, Henry Bridge Rd, Saint Anselm Dr, and Pinard St
- **Local/Collector (151-5000 average daily trips)**
  - NH-13, Tirrell Hill Rd, Tibbetts Hill Rd, East Dunbarton Rd, Paige Hill Rd, Locust Hill Rd, Black Brook Rd, Montelona Rd, Addison Rd, Parker Station Rd, Normand Rd, Wallace Rd, Bog Rd, Lesnyk Rd, etc.
- **Low volume (0-150 average daily trips)**
  - Neighborhoods and dead ends

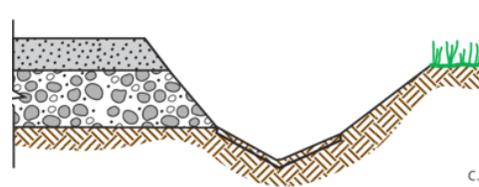
# What makes up a flexible pavement road?



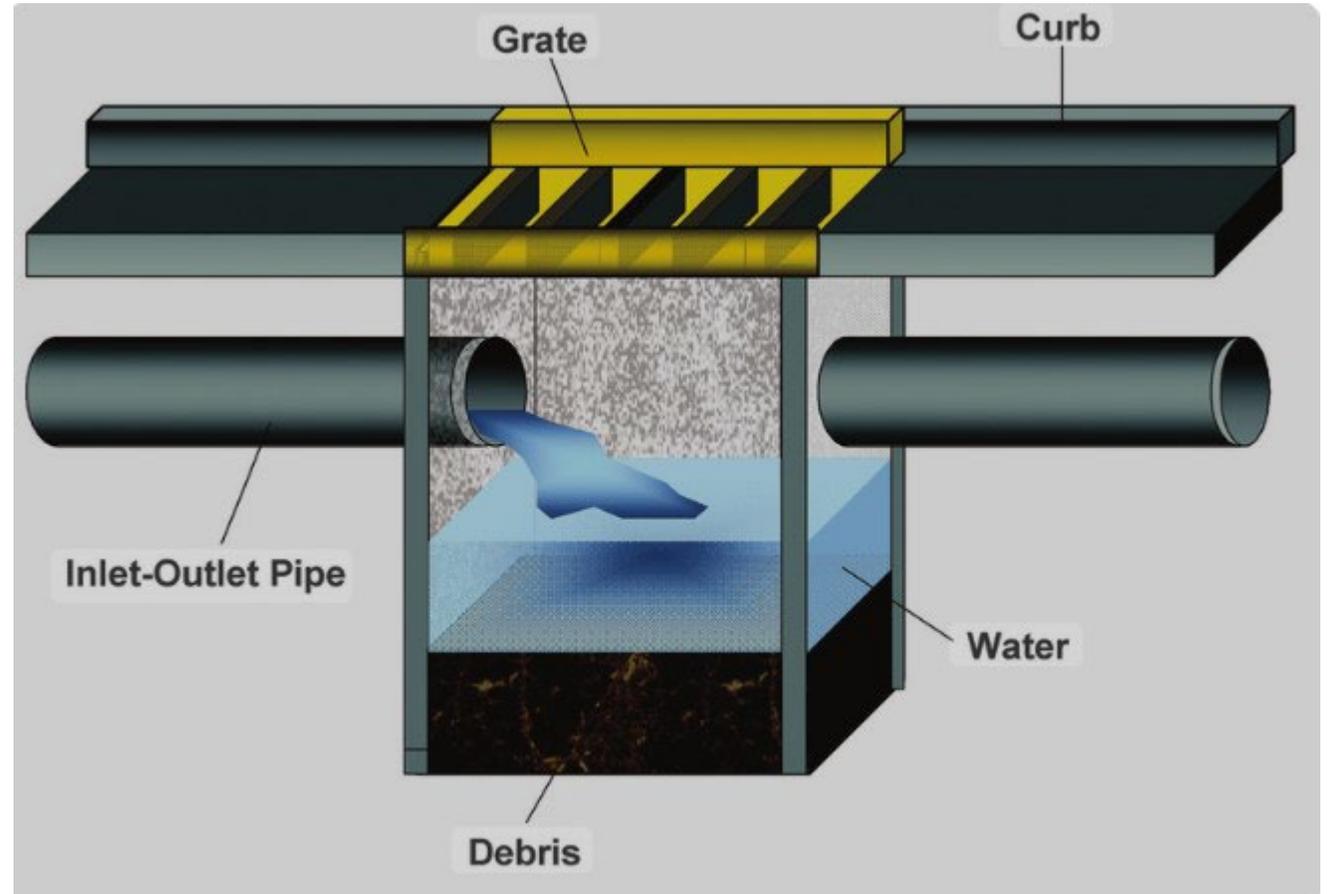
# Water is a road's enemy – see “*high way*”



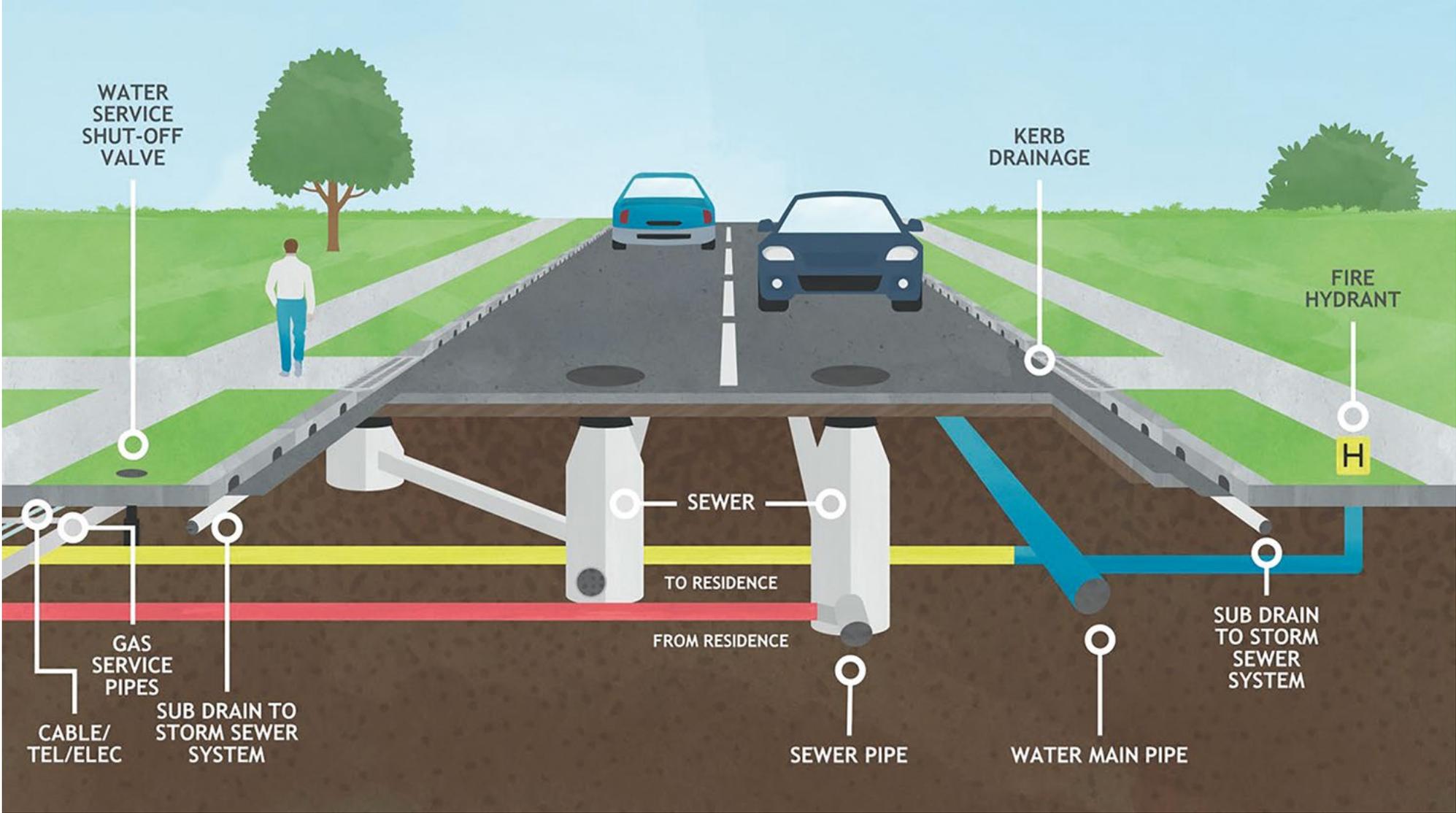
Closed drainage - pipe



Open drainage - ditch



# What else is in the right-of-way?



# General Categories of Road Maintenance

- **Reclaim/rebuild projects (failed/poor roads \$\$\$)**
  - Includes surface and subsurface drainage, grinding existing pavement, and repaving with 2.5” base course and 1.5” wearing course (typ. in second season), shoulder gravel. May include curbing/berm, ROW clearing, and sidewalk/ADA improvements
- **Maintenance overlay paving (keep good roads good \$\$)**
  - 1” – 1.5” pavement over existing roadway surface, minimal drainage work prior (changing culverts, ditch line restoration, installing some new inlet structures), shoulder gravel. May include granite curbing reset or asphalt berm replacement, ADA improvements
- **Riding surface “bandaid” paving (failed/poor roads \$)**
  - Up to 2” of pavement over a road in poor/failed condition without changes to drainage to temporarily restore safe and maintainable road surface, shoulder gravel. May include replacement of failing culverts.
- **Mill & Fill repairs \$**
  - Grinding out medium or small sections of failed pavement and patching back in

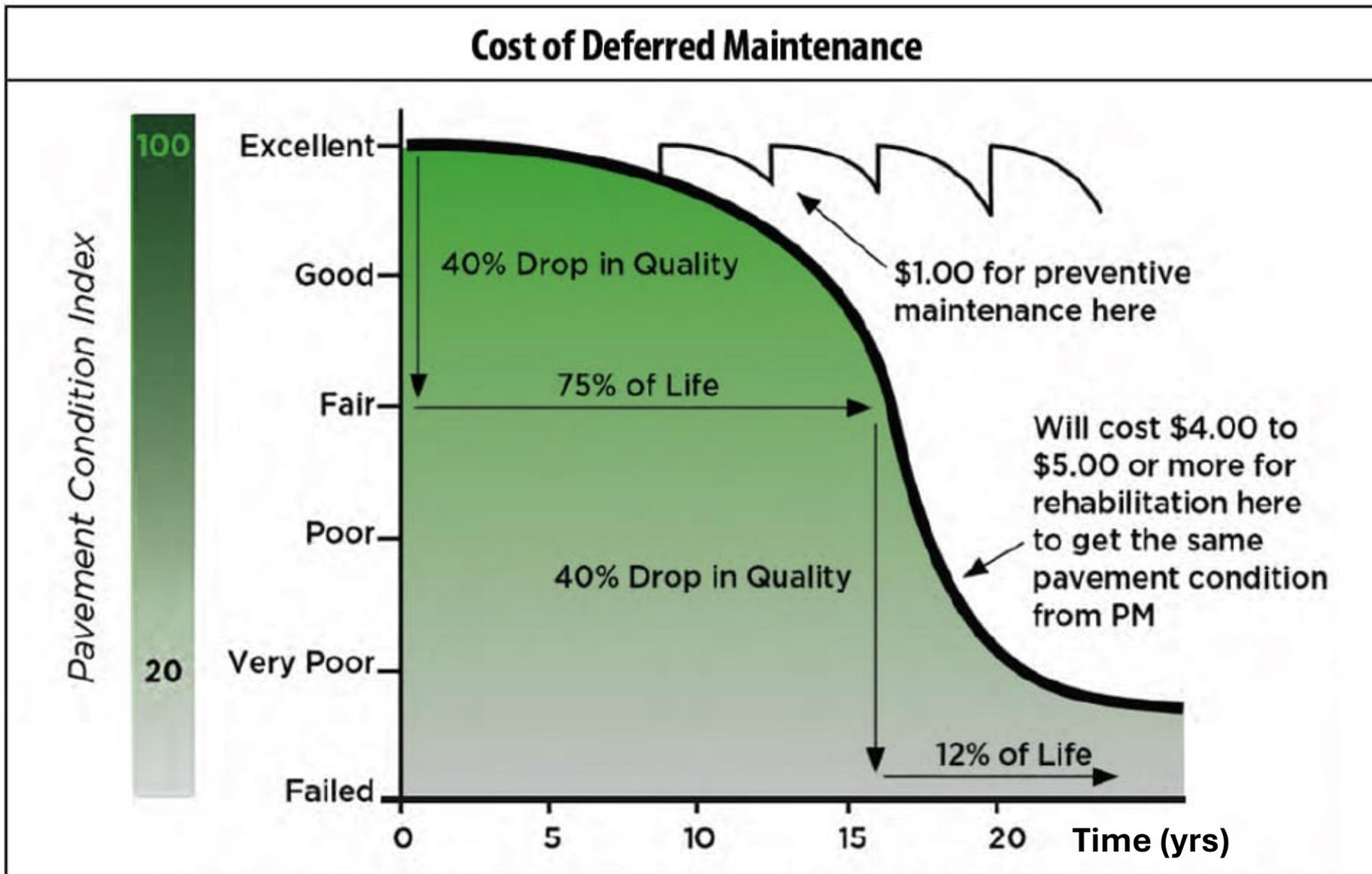


Figure 9

Source: FHWA

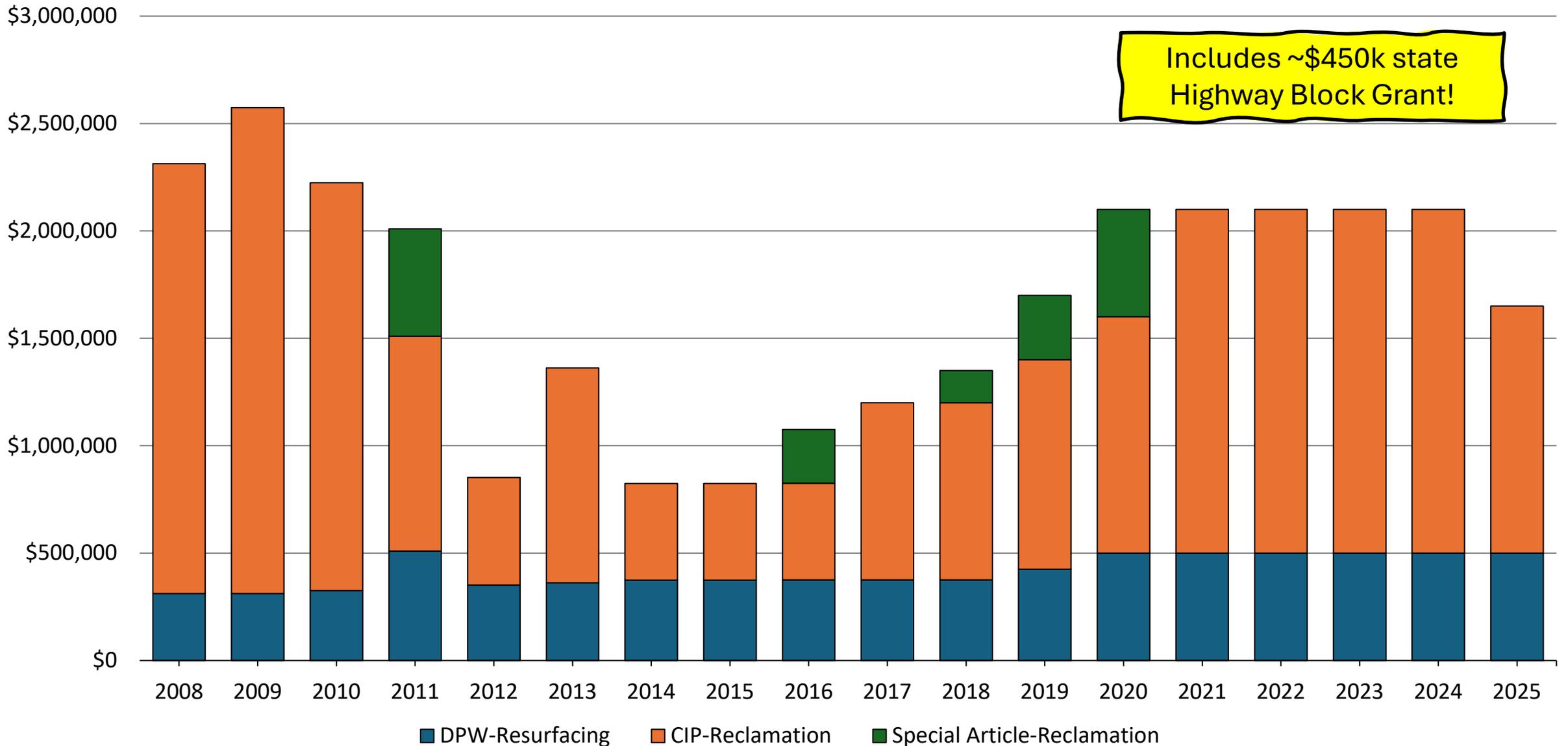
The figure shows how an active program of preventative maintenance reduces the long-term costs to keep a roadway in good condition.

# Road Plan History

- Modern road plan began in 2002 after several years of deferred maintenance
- Initial funding was healthy, peaking in 2009 at over \$2.5M
- Large (58%) cut in 2012 as municipal revenues declined
- Main/collector roads received the focus as the budget was slowly built back up – the most benefit for the most people
- Budget remained level until 2025 (20% cut)
- Significant inflation in road construction since 2008 (esp 2021+)
- Select Board adjusted priorities to fund Laurel St project

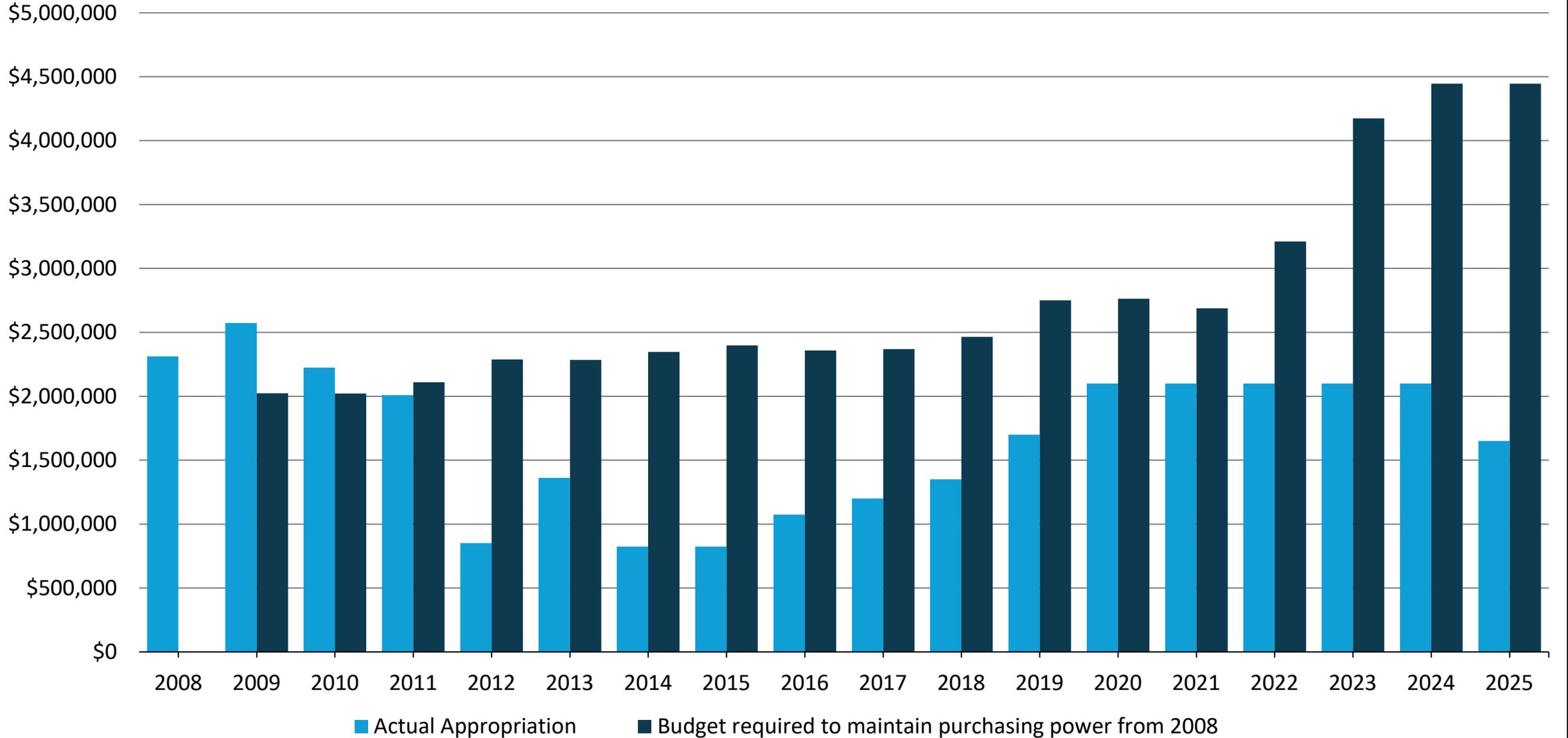
# Town of Goffstown

## Road Plan Funding - Reclamation & Resurfacing



# Town of Goffstown

## Road Plan Funding Gap



# What we get for our Road Plan budget

Type of Treatment	Cost/ CL Mile 2016	Cost/ CL Mile 2025	Added Service Life
1.5” maintenance asphalt overlay	\$72,000	\$117,000	11 years
Reclaim and Drainage, rural locations	\$300,000	\$560,000	25 years
Reclaim and Drainage, urban locations	\$517,000	\$861,000	25 years
Reclaim and Drainage, urban (contracted)	\$950,000	\$2,150,000	25 years

# Remaining Service Life (RSL) network analysis

- A new road is expected to have a service life of 25 years
- Each road ages 1.0 years per year
- With ~130 miles of road in town, we lose 130 mile-years of service life for the entire road network every year
- Maintenance projects add service life back into the network
  - Reclaim adds ~25 years
  - Maintenance paving adds ~11 years
  - Bandaid paving adds ~5 years
- **The goal is to inject more service life into the road network than you lose in any given year**

# Remaining Service Life (RSL) scenarios

- Assume we lose 130 mile-years of service life each year
- Assume reclaim adds 25 years of service life, and overlays add 11
- **Worst First Approach**
  - Spend full \$1.65M budget on reclaim projects (about 2 miles if in-house)
  - Inject ~50 mile-years of service life (2 miles x 25 yrs)
  - Overall road network ages ~80 mile-years
- **Maintenance-only approach**
  - Spend full \$1.65M budget on maintenance overlay projects (about 14 mi)
  - Inject ~154 mile-years of service life (14 miles x 11 yrs)
  - Overall road network gains ~34 mile-years (but no failed streets are improved, and we end the year with more failed streets than we started)