Forget about potholes. According to public works directors, highway superintendents and other local transportation officials, the first thing residents will grouse about when asked about the condition of their roads is “chip seal” resurfacing projects. It’s easy to understand why. During chip sealing, crews spray oily liquid asphalt and spread gravel, then steamroll the mix to resurface the road. The process leaves behind a bumpy coat of inky pebbles that adhere to tires and car undersides until workers return later to clean up the residue.

“Everybody hates chip seals,” says Robert “Brutus” Cantoreggi, the public works director in Franklin. “It makes the road rough. They say, ‘I can’t skateboard. I can’t bike.’” But residents of Franklin and other Massachusetts municipalities can expect plenty more chip sealing in the future unless Beacon Hill leaders step up, say Cantoreggi and others.

The Massachusetts Department of Transportation’s Chapter 90 program, which funds local road repairs, has been held flat at $200 million annually for years, while the prices of materials, labor and related costs have been rising, say local officials. The situation is putting pressure on municipalities throughout the Commonwealth to delay road maintenance, save allocations for several years in order to fund major projects, and pursue chip seals and other unpopular options when they must take action to keep streets safe.

Reconstructing a mile of road, which requires removing and replacing pavement, costs more than $1 million, according to MassDOT figures. Chip sealing the same length of road costs as little as $25,000, and prolongs the life of the existing pavement for another ten years or so. “It’s the biggest bang for the buck,” says John Walden, manager of Westborough’s Department of Public Works. He adds, however, that he’s heard the complaints, too. “People are demanding hot top. They don’t want the inconvenience of the chip seal.”

Not Keeping Up
Despite their best efforts to stretch their budgets, Walden and other local officials say they are losing the battle against New England winters, increased traffic, and routine wear and tear on their streets, bridges and other transportation infrastructure.

Massachusetts has 30,000 miles of local roads. Without care, they fall apart in about twenty years. Years of stagnant funding has led to postponed roadwork that is now mounting around the Commonwealth. “We get $70,000 a year,” says Jim Lovejoy, a Mount Washington selectman who is also president of the Massachusetts Selectmen’s Association. “I don’t know what you think can be done with $70,000 in highway construction funds, but it’s not very much.”

Chapter 90 money, funded in part via the state’s gas tax, is the only state aid designated for the mundane but vital work of resurfacing roads and sidewalks, fixing bridges, and other related work. MassDOT disperses the funds using a formula that takes account of road mileage, population and the amount of employment within a city or town’s borders. The funding can also cover equipment, design and other costs.

Except for an extra one-off disbursement of $100 million that Governor Charlie Baker released shortly after
taking office in 2015, the state’s annual
Chapter 90 funding has been unchanged
since fiscal 2012. Rising prices alone
have gobbled up around $22 million of
the buying power of the $200 million
appropriation since then, according to
the federal Bureau of Labor Statistics’
inflation calculator.

The Massachusetts Municipal Associ-
ation estimates that cities and towns need
nearly $700 million annually to keep the
Commonwealth’s roads in a state of good
repair. Accordingly, the association has
called on Beacon Hill politicians to increase
Chapter 90 funding to $300 million a year
and tie future increases to inflation.

The price of oil, in particular, could
cause cities and towns to scale back in the
near future unless they receive more
funding. After a few years near the rock
bottom, oil prices are now ticking up.
“ Asphalt is a derivative of oil,” says
Marshfield Public Works Superintendent
Tom Reynolds. “You are at their mercy if
they raise the price of oil.”

Digging Deep
Mayors, city councils and town meetings
can allocate money for roadwork, too, of
course—though doing so may require
getting voters to override Proposition 2½
tax limits. But many cities and towns, like
tiny Mount Washington (population 164),
can’t leverage local tax dollars without
Chapter 90.

“The Town of Mount Washington
usually saves a couple years of Chapter
90 money and matches it dollar for
dollar with town funds to actually bring
a guy with blacktop up the mountain,”
says Lovejoy.

Taxpayers are often not eager to pay
for routine maintenance to prevent
crumbling roads and bridges in the future
when school departments are threatening
layoffs unless they receive more money.
That means Chapter 90 often gives public
works departments their only wiggle
room to operate.

“Chapter 90 is really important
because we are in competition with the
school money,” says Walden, adding that
he bought equipment with Chapter 90
money and saved up around $1 million for
future big road projects in Westborough.
“Schools come first.”

That leaves plenty of roads in increas-
ingly poor condition as roadwork backlogs
mount, says Cantoreggi. “Basically, our
roads six years ago were maybe at a
C+, ” he says. “Now we’re looking at a
C-, and we’re looking at a D- maybe in
five years.”

The lack of maintenance takes its toll.
The American Society of Civil Engineers
estimates that bad roads cost Massachusetts
drivers almost $540 a year in auto repairs
for incidents like tires blowing out after
striking a deep pothole.

Roads should be maintained at least
every seven years, say local officials.
Ignoring them beyond the seven-year
mark results in potential added costs
later. Road reconstruction projects are far
more expensive than maintenance, and
often incur added costs to make them

\[ \text{Source: Massachusetts Department of Transportation} \]
\[ * \text{Bond passed in 2013, $100M released in 2015} \]
compliant with the American Disabilities Act or the latest stormwater regulations, for example. “If you can stay on top of these roads within seven years after you pave, it preserves the roads a little longer, thus saving you money,” says Reynolds.

Those preservation efforts can only continue for so long, however.

**The Cost of Deferred Maintenance**

In a draft study of Chapter 90 funding over a five-year period through fiscal 2016, the Berkshire Regional Planning Commission found that municipalities in the western Massachusetts county were spending less on resurfacing and spending more on reconstruction projects in recent years, while also setting aside more money from their Chapter 90 allocations.

On one hand, local officials might be wisely stretching their dollars, the report said. On the other, the deteriorating conditions of Berkshire County roads could also be forcing officials to save up funding and appropriate local tax dollars to tackle major projects that have been ignored for too long.

“Even a small bridge project can cost upwards of a million dollars,” the authors of the draft study wrote. “Roughly half of Berkshire communities do not receive this level of funding in a five-year period.”

In Braintree, Mayor Joseph Sullivan and the Town Council use local tax dollars to add $1.7 million to the $986,000 Chapter 90 allocation they receive annually. This gives the town sufficient funding to repair about forty streets a year—a clip that means Braintree’s public works crews are able to maintain most roads properly. Sullivan says his constituents appreciate it, in part because good roads improve their property values.

“We spend a lot of money,” Sullivan says. “I think it makes a noticeable difference. It’s a sense of pride. When someone sees their road, their sidewalks, their neighborhood being improved upon, they see their tax dollars at work.”

Sullivan is satisfied with his city’s roadwork schedule, but supports the MMA’s push for $300 million a year. “Let’s be candid,” he says. “It’s never enough. There are always needs.”

But Sullivan also noted that the MMA’s proposal calls on the governor and Legislature to fund Chapter 90 for multi-year periods rather than approving disbursements in one-year budget cycles. “If you can get that predictable, constant steady revenue source, then you can plan,” he says.

Technically, cities and towns can’t approve bids for roadwork until they have the official notice of their Chapter 90 allocations. Usually, the state sends these notices in April or May, well before the fiscal year begins on July 1, but they don’t become official until the bond bill that creates the funding is passed by the Legislature and signed by the governor. In some cases, the final notices have been delayed until mid-summer or as late as September. Late notice means public works departments need to put off awarding bids and start work later. This increases costs, and can force officials to postpone projects until the next year if they don’t feel as if they have sufficient time to complete the work before the ground starts freezing in November.

“The timing of the release of the money given out in April and early May is equally important as the amount of money,” says Sullivan, a former state representative who served as House chair of the Transportation Committee. He understands that state leaders are reluctant to increase spending, especially in light of big capital projects like the $300 million Longfellow Bridge revamp in Boston that’s now coming to an end.

“We have large capital projects that need attention,” he says. “I understand that.” But local roads are the lifeblood of the Commonwealth. They can’t be ignored.

“The best way to create a stronger partnership with municipalities is to grow the Chapter 90 program, because every municipality benefits from the funding,” says Sullivan. “In that way, I hate to be corny, but you truly do touch the quality of life, physically, in every city and town.”