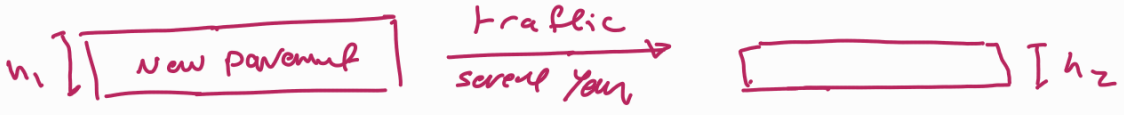
$AV_{final} \approx 4$

$AV_{initial}$ should be 8!



After construct. $AV_{initial}$.

$h_2 < h_1$

$AV_1 > AV_2$

AV_{final}.

AV_2 several years of traffic are prefer to be around 4!

Now AV_{final} [After traffic.

- Too low → ≤ 2! → These mixture are ultimately consolidate, Rutting and shoving are expect

- Too High → AV_2 ≥ 5! → Premature cracking, raveling and stripping.

Stripping

Raveling.

Cracking

$VMA\,(\%) = \frac{V_{MA}(\%)}{V_{mix}} = V_{be} + V_a \Rightarrow VMA = V_{be} + V_a \rightarrow VMA \begin{cases} \rightarrow V_{be} \\ \hookrightarrow V_a \end{cases}$

~ Assume the P_{be} = Constant → V_{be} = Constant

$VMA = V_{be} + V_a$

V_{be} Constant.

- ↑ VMA → V_a ↑ → → Premature cracking, raveling and stripping.
- ↓ VMA → V_a ↓ → Rutting and shoving are expected

~ Assume V_a = Constant = Target air void content = 3% or 4% or 5%

V_a Constant

- ↑ VMA → ↑ V_{be} → Bleeding when temperature rise and asphalt expands
- ↓ VMA → ↓ V_{be} → Not enough to adequate adhesion to bind the aggregate

→ Now

minimum ≤ VMA ≤ Maximum