

HighwAI

An Intro to AI for Highway Superintendents



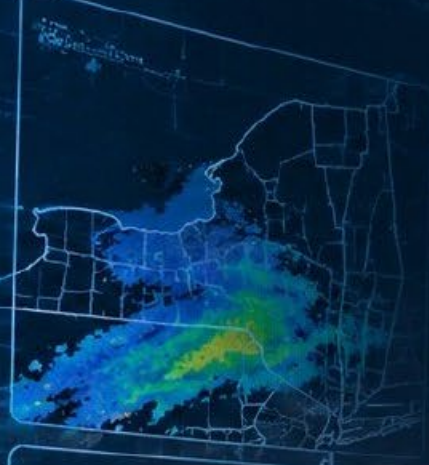
Work **Smarter.**



Decide **Faster.**



Communicate **Better.**



SNOWFALL FORECAST



3-6" 6-10" 10+"

SALT USAGE



WEATHER



Nicholas DeVito

Highway Superintendent
Town of Somers, New York



COURSE OVERVIEW

SIX PRACTICAL TOPICS IN 60 MINUTES

1



What is AI?

Plain language, real-world examples, and what it means for town highway departments.

10 MIN

2



How to Prompt to Get What You Want

A simple method to get better, more useful answers.

10 MIN

3



Administrative & Clerical Uses

Save time on everyday tasks and communication.

10 MIN

4



Tracking Storm Data & Salt Usage

Turn your data into useful insights.

10 MIN

5



Weather Prediction

Use AI to understand forecasts and plan operations.

10 MIN

6



Influencing Your Town Board

Use AI to build clear, data-driven, persuasive presentations.

10 MIN

WEATHER FORECAST



SALT USAGE



STORM DATA



3

LEARNING OBJECTIVES

WHAT YOU'LL WALK AWAY WITH

Practical skills you can use right away in your department.

**SAVE TIME**

Get better answers faster for everyday tasks.

**WRITE & COMMUNICATE BETTER**

Create clear, professional emails, notices, reports, and presentations.

**TURN DATA INTO USEFUL INFORMATION**

Use AI to analyze storm data, salt usage, costs, and trends.

**MAKE BETTER OPERATIONAL DECISIONS**

Use AI to understand weather forecasts and plan ahead.

**BUILD STRONGER TOWN BOARD PRESENTATIONS**

Use data and clear messaging to explain needs and get support.

**USE AI RESPONSIBLY**

Understand the limits, protect sensitive information, and verify results.



4

WHAT IS AI?

Think of it as a very fast digital assistant.

1

READ

AI can take in information from many sources.



Documents
& Reports



Emails



Spreadsheets
& Data



Weather
Forecasts



Websites
& Regulations



Meeting Notes
& More

2

THINK

It processes the information, finds patterns, and analyzes it in seconds.

Organize

Compare

Summarize

Find
Patterns

Analyze

Identify
Options

3

RESPOND

It gives you a useful answer, draft, summary, or analysis.



Draft
Emails



Create
Reports



Summarize
Information



Suggest
Options



Analyze
Data



Answer
Questions

COMMON AI OPTIONS

All are useful. Choose what fits your needs.



ChatGPT

Great for general use, writing, analysis and brainstorming.

Free Plan
(limited use)

Plus Plan
\$20/month



Microsoft Copilot

Integrated with Microsoft 365 (Word, Excel, Outlook).

\$20/month
(per user)



Claude

Excellent for long documents, analysis and clear writing.

Free Plan
(limited use)

Pro Plan
\$20/month



Gemini

Good for research, summaries and multimodal content.

Free Plan
(limited use)

Advanced Plan
\$20/month
(Gemini Advanced)



**AI DOESN'T REPLACE YOUR EXPERIENCE.
IT HELPS YOU USE IT FASTER.**

5

WHICH AI SHOULD I USE?

Four major options. Different strengths. Similar starting costs.



ChatGPT

STRONG ALL-AROUND CHOICE



Writing
& Drafting



Data
Analysis



Files
& Documents



Research
& Answers

Free Plan

Available

\$0

Go Plan

More access and higher limits

\$8 / month

Plus Plan

Most popular for individuals

\$20 / month



Claude

STRONG WITH DOCUMENTS
& POLISHED WRITING



Long
Documents



Analysis
& Summaries



Writing
& Editing



Files
& Context

Free Plan

Available

\$0

Pro Plan

Higher limits and more features

\$20 / month

(\$17 / month when paid annually)



FITS NATURALLY WITH GOOGLE



Gmail
Integration



Docs
& Drive



Research
& Answers



Multimodal
(text, images, video)

Free Plan

Available

\$0

Google AI Plus

More access and Gemini 1.5+

\$9.99 / month

Google AI Pro

Higher limits and additional tools

\$19.99 / month



Microsoft Copilot

FITS NATURALLY WITH MICROSOFT 365



Word
Drafting



Excel
Analysis



PowerPoint
Presentations



Outlook
Emails & Summaries

Free Plan

Available (limited features)

\$0

Microsoft 365 Personal

Includes Copilot features

\$9.99 / month

Microsoft 365 Copilot Business

For organizations (additional features)

\$25.20 / user / month

(annual options available)



FREE

Try it. Learn prompting.
Expect limits.



INDIVIDUAL PAID

Higher limits + better tools.
Usually about \$10–\$20/month.



DEPARTMENT / ORGANIZATION

Admin controls • centralized billing •
workplace data protections.



FOR MUNICIPAL USE:

Check your town's IT, records-retention, cybersecurity and data policies
before uploading sensitive or non-public information.

U.S. pricing shown • September 2026
Plans and prices change.

6

FROM A BAD PROMPT TO A GREAT PROMPT

The more detail you give, the better and more useful the response.



BAD PROMPT

Too vague. Not enough context.

Write an email about a pothole.



AI RESPONSE (EXAMPLE)

Subject: Pothole

Hello,

We are aware of the pothole and will look into it. Thank you for your patience.

Sincerely,
Highway Department



GREAT PROMPT

Specific, with context, tone, and desired format.

Write a professional but friendly email to a resident about a pothole on Hill Street in Somers. Let them know we have received their request, explain that we prioritize safety issues and will repair it within 24–48 hours (weather permitting). Keep it short, clear and reassuring. End with my name and title.



AI RESPONSE (EXAMPLE)

Subject: Pothole on Hill Street

Hello,

Thank you for bringing the pothole on Hill Street to our attention. We have added it to our repair list and plan to address it within 24–48 hours, weather permitting. We appreciate your help in keeping our roads safe and we will let you know once the repair is completed.

If you notice any additional issues, please don't hesitate to reach out.

Thank you,
Nicholas DeVito
Highway Superintendent
Town of Somers

WHY IT WORKS



Specific location
(Hill Street)



Clear purpose
(email to resident)



Provides context
(prioritization and timeline)



Sets the tone
(professional but friendly)



Specifies format
(short and clear)



Includes signature
(name and title)



KEY TAKEAWAY:

The more details you include, the more accurate, useful, and professional the response.

7 THE HIGHWAI PROMPT FORMULA

Give AI a clear assignment, not a guessing game.

1. ROLE

Who should AI act like?

"You are assisting a NYS Highway Superintendent."

2. TASK

What do you want done?

"Draft a response to a resident."

3. CONTEXT

What does AI need to know?

"Pothole reported on Hill Street; normal response 24-48 hours."

4. FORMAT

What should the result look like?

"Under 150 words, professional, friendly, ready to email."

ROLE + TASK + CONTEXT + FORMAT = BETTER RESULTS

Think of it like assigning work to a competent new employee: explain the job, give the facts, and define the finished product.

KEY TAKEAWAY • Better instructions produce better first drafts.

8

KEEP THE CONVERSATION GOING

Your first prompt doesn't have to be perfect. Refine, adjust, and get exactly what you need.

*It's a conversation,
not a one-shot search.*

1

INITIAL PROMPT

Ask for what you need.



You are assisting a NYS Highway Superintendent. Draft a response to a resident who reported a pothole on Hill Street. Our crew will inspect it and normally makes repairs within 24–48 hours, weather permitting. Write a professional and friendly email.



Subject: Pothole on Hill Street

Hello,
Thank you for bringing the pothole on Hill Street to our attention. Our crew will inspect the location and, if needed, make repairs within 24–48 hours, weather permitting. We appreciate you helping us keep our roads safe.
Thank you,
Nicholas DeVito
Highway Superintendent
Town of Somers

2

FOLLOW-UP #1

Make it shorter.



Make it shorter.



Subject: Pothole on Hill Street

Hello,
Thanks for letting us know about the pothole on Hill Street. Our crew will take a look and make repairs within 24–48 hours, weather permitting.

We appreciate your patience.

Thanks,
Nick DeVito
Highway Superintendent
Town of Somers

3

FOLLOW-UP #2

Make it more conversational.



Make it sound less bureaucratic and more conversational.



Subject: Pothole on Hill Street

Hi there,
Thanks for reaching out about the pothole on Hill Street. We've added it to our list and our crew will check it out as soon as possible. In most cases we're able to make the repair within 24–48 hours, weather permitting.

We appreciate you letting us know and helping us keep our roads in good shape!

Thanks,
Nick

4

DIFFERENT FORMAT

Turn it into a social media post.



Now turn this into a Facebook post notifying residents about our pothole repair program.



Facebook Post
Noticed a pothole?
Let us know!

Our Highway Department inspects reported potholes and typically makes repairs within 24–48 hours, weather permitting.

You can report a pothole by calling our office, using our online form, or sending us a message.

Thank you for helping us keep Somers roads safe and in good condition!



5

ANOTHER FORMAT

Turn it into a Town Board update.



Turn the same information into a one-paragraph update for the Town Board.



Town Board Update

The Highway Department continues to receive and respond to resident reports of potholes through phone calls, online submissions, and direct communication. All reported locations are inspected by our crew, and repairs are typically completed within 24–48 hours, weather permitting. This timely response helps maintain safe road conditions and reflects our ongoing commitment to infrastructure maintenance and resident service.



QUICK FOLLOW-UP PROMPTS TO TRY:



"Make it shorter."

Get a more concise response.



"Give me three options."

Get different versions to choose from.



"Ask me what information you're missing."

Helps you provide a better prompt.

9 ADMINISTRATIVE & CLERICAL USES

RESIDENT EMAILS

Handle common resident inquiries quickly, professionally, and consistently.

1 RESIDENT COMPLAINT

Actual email from a resident.



From: Town Resident
To: Highway Department
Subject: Pothole on Hill Street

There's been a huge pothole in front of my house for weeks. I've called twice. Why hasn't the Highway Department fixed it? It's getting worse and damaging cars. This is unacceptable. I pay my taxes and expect this to be taken care of immediately.

2 AI DRAFT

Professional response in seconds.



AI RESPONSE (DRAFT)

Subject: Pothole on Hill Street

Hello,

Thank you for bringing the pothole on Hill Street to our attention. Our crew will inspect the location and plan for repair within 24–48 hours, weather permitting. We appreciate your patience as we work to keep our roads safe and in good condition.

Please let us know if you notice any additional issues.

Thank you,
Somers Highway Department

3 YOUR REVIEW

Verify facts and make any adjustments.



Your Review

Subject: Pothole on Hill Street

Hello,

Thank you for bringing the pothole on Hill Street to our attention. Our crew **inspected the location this morning** and is scheduled for repair within 24–48 hours, weather permitting. We appreciate your patience as we work to keep our roads safe and in good condition.

Please let us know if you notice any additional issues.

Thank you,
Nicholas DeVito
Highway Superintendent
Town of Somers

4 SEND

Professional, consistent, and ready to go.



Final Email

Subject: Pothole on Hill Street

Hello,

Thank you for bringing the pothole on Hill Street to our attention. Our crew inspected the location this morning and it is scheduled for repair within 24–48 hours, weather permitting. We appreciate your patience as we work to keep our roads safe and in good condition.

Please let us know if you notice any additional issues.

Thank you,
Nicholas DeVito
Highway Superintendent
Town of Somers

COMMON RESIDENT EMAIL TOPICS



Potholes and road conditions



Mailbox damage



Drainage complaints



Snowplowing complaints



Trees and right-of-way questions



Road closures



Construction schedules



"Why did you plow snow into my driveway?"



KEY TAKEAWAY:

DON'T START WITH A BLANK PAGE. START WITH A DRAFT.



AI drafts the response.
You verify the facts and make the final call.

10

ADMINISTRATIVE & CLERICAL USES

MEETING NOTES

Turn long meetings into clear, organized, and actionable notes in minutes.

1

MEETING INPUT

Provide the raw information from the meeting.



Options:

- Your rough notes
- Audio transcript
- Agenda items
- Bullet points
- Ask AI to summarize from a recording

EXAMPLE INPUT (ROUGH NOTES)

- CHIPS funding discussed
- Paving plan for 2026
- Resident complaint - drainage on Maple Ave
- New hire starting 10/1
- Salt contract renewal
- Budget review next month
- Supervisor asked for pothole update
- Discussion about Route 100 sidewalks

2

AI SUMMARY

AI organizes your notes into a clear, structured summary.



AI RESPONSE (EXAMPLE)

Town Board Meeting Notes

Date: September 10, 2026
Location: Somers Town Hall
Attendees: Supervisor, Town Board, Highway Superintendent, Department Heads

- CHIPS Funding**
 - Board discussed CHIPS allocation and potential projects for 2026.
 - Supervisor requested updated cost estimates by next meeting.
- 2026 Paving Plan**
 - Reviewed priority roads and budget.
 - Board supportive of proposed plan.
- Maple Avenue Drainage Complaint**
 - Resident reported ongoing drainage issue.
 - Highway Department will inspect and provide an update.
- Personnel**
 - New hire (laborer) starting 10/1.
- Salt Contract**
 - Reviewed renewal options and pricing.
 - Decision at next meeting.
- Budget**
 - Highway Department budget review scheduled for next month.
- Route 100 Sidewalks**
 - Discussed NYSDOT coordination and next steps.

3

KEY TAKEAWAYS

Highlight the most important items and action items.



KEY TAKEAWAYS

- Board supportive of 2026 paving plan.
- Supervisor to provide updated CHIPS cost estimates.
- Inspect drainage issue on Maple Ave and report back.
- New laborer starting 10/1.
- Salt contract renewal decision next meeting.
- Budget review next month.
- Continue coordination with NYSDOT on Route 100 sidewalks.



ACTION ITEMS

- Prepare CHIPS cost estimates by next meeting.
- Inspect Maple Ave drainage and provide update.
- Finalize salt contract options.
- Prepare budget materials.
- Follow up with NYSDOT on Route 100 sidewalk project.

4

DIFFERENT OUTPUTS

Turn the same meeting into multiple useful documents.



Full Meeting Minutes (detailed)



Short Summary (1 page)



Action Item List (with responsible parties)



Follow-Up Emails (to board members or staff)



Department Update (for next meeting)



Press Release (if needed)

ADDITIONAL MEETING USES



Town Board meetings



Department staff meetings



Union discussions



Project status meetings



Bid openings



Public hearings



Convert audio to notes



Prepare agendas and follow-ups



KEY TAKEAWAY:

AI turns long, unorganized meeting notes into clear, accurate, and actionable information in minutes.



You still review and verify the details, but AI saves hours of time and keeps everyone aligned.

11

STORM TRACKING & AFTER-ACTION ANALYSIS

TURN EVERY STORM INTO DATA. LEARN FROM IT. PLAN AHEAD. DO IT BETTER NEXT TIME.

1

STORM INPUT

Enter key details from the storm.

	Snowfall	7.5"
	Duration	11 hours
	Pavement Temp	24–29°F
	Trucks Deployed	14
	Salt Used	86 tons
	Overtime Hours	212 hours
	Resident Complaints	17
	Equipment Issues	2

2

AI ANALYSIS

AI turns your data into useful insights.



STORM SUMMARY

This 7.5" storm required 86 tons of salt and 212 overtime hours. Overall performance was consistent with similar storms, with slightly higher salt usage per inch of snow.

KEY METRICS

	Salt per lane mile	0.68 tons
	Salt per inch of snow	11.5 tons
	Estimated labor cost	\$9,540
	Total estimated cost	\$18,900

COMPARISON TO PREVIOUS STORMS

Storm Date	Snowfall	Salt Used	Salt/Inch	Labor Hours
Jan 14, 2026	5.2"	62	11.9	176
Feb 3, 2026	7.5"	86	11.5	212
Mar 1, 2025	8.1"	104	12.8	248
Jan 16, 2025	4.6"	55	12.0	160

OBSERVATIONS

-  Salt usage per inch was 10% lower than last year's 7–8" storm.
-  Overtime hours were consistent with similar storms.
-  Complaints were higher than average (17 vs. 11) – mostly related to side streets.
-  2 equipment issues – both related to down pressure on Truck #4.

3

AI RECOMMENDATIONS

Get practical takeaways for next time.



Pre-treat earlier

Road surface temps dropped quickly. Consider starting pre-treatment 1–2 hours sooner based on forecast trends.



Adjust routes

High complaint areas were side streets in Sections 2 and 4. Consider earlier pass or additional resources.



Review truck setup

Investigate down pressure issues on Truck #4 and #11 before next storm.



Salt rate performed well

Salt per inch was lower than last year's similar storm. Current application rates appear effective.



Staffing worked

14 trucks and current staffing levels handled the storm effectively.

4

WHAT SHOULD WE CHANGE NEXT TIME?

AI provides clear, actionable recommendations.

- Start pre-treatment earlier based on forecasted pavement temps.
- Adjust route timing for high-complaint side streets.
- Inspect and repair down pressure on Truck #4 and #11.
- Consider additional resources if a similar storm is forecasted.
- Continue current salt application rates.



KEY TAKEAWAY: TURN STORM DATA INTO BETTER DECISIONS.



AI helps you find patterns, identify issues, and improve your operations – so you can be more efficient, prepared, and effective every time it snows.

12

SALT USAGE & COST ANALYSIS

Don't just track salt. Understand what drove the usage.

Storm	Snow	Salt	Salt / in.	Cost
A	5.2"	62 t	11.9 t	\$5,270
B	7.5"	86 t	11.5 t	\$7,310
C	8.1"	104 t	12.8 t	\$8,840
D	4.6"	55 t	12.0 t	\$4,675

WHY DID STORM C USE MORE SALT?

- Colder pavement temperatures?
- Longer duration?
- More icing or mixed precipitation?
- Different application rates?
- More treatment cycles?
- Equipment calibration?

AI DOESN'T DECIDE THAT 104 TONS WAS "TOO MUCH."

It helps you determine why 104 tons was used and whether the conditions explain it.

13

COMPARE APPLES TO APPLES

Match storms by conditions before comparing performance.

CURRENT STORM

7.5" snowfall
26°F avg. pavement temp
11-hour duration
86 tons salt
\$7,310 salt cost

AI FINDS SIMILAR STORMS

Pavement temp within $\pm 5^{\circ}\text{F}$
Snowfall within $\pm 2"$
Duration 8–14 hours
Similar precipitation type
Comparable treatment strategy

WHAT THE COMPARISON SHOWS

Salt used: about +2%
Salt per inch: about -1%
Total salt cost: about +3%
Pavement temp: about 1°F colder
No obvious usage spike

CONTEXT MATTERS.

A 7-inch storm at 31°F is not the same operational event as a 7-inch storm at 15°F .

AI + WEATHER FORECASTING

AI is not the forecast. AI helps you understand the forecast.

INPUTS

NWS forecast
Weather models
Radar
Hourly forecast
Pavement temperatures
Local experience

AI HELPS SYNTHESIZE

Timing and transitions
Areas of uncertainty
Air vs. pavement temperature
Snowfall rates and duration
Operational questions
Plain-language summary

OPERATIONAL BRIEF

Precipitation: 7–9 PM
Likely starts as snow
Possible mix after midnight
Pavement: 27–30°F
Heaviest rates: 10 PM–2 AM
Main uncertainty: changeover timing

Use official weather sources. Use AI to turn the information into an operational plan.

COMPARING THE MODELS

See where forecasts agree, where they disagree, and what that means operationally.

GFS

5–7"

ECMWF

7–9"

NAM

8–11"

HRRR

6–8"

NWS

6–10"

WHERE DO THEY AGREE?

Most guidance clusters around roughly 6–10 inches. Snow is the primary precipitation type. The exact total remains uncertain.

WHAT SHOULD OPERATIONS WATCH?

- Warm-air intrusion timing
- Snowfall rate
- Pavement temperature trend
- Whether the higher-end solutions persist

DON'T ASK AI: "HOW MUCH SNOW ARE WE GETTING?" • ASK: "WHAT DOES THIS FORECAST RANGE MEAN FOR MY OPERATION?"

16 FROM HIGHWAY DATA TO A CLEAR STORY

Turn paving numbers into useful calculations, visuals, and plain-English summaries.

INPUT YOUR DATA

126 lane miles
\$500,000 annual paving budget
\$106 / ton installed asphalt
2-inch overlay
24-foot average width
~10-year pavement life

AI CALCULATES

Approx. tons per mile
Approx. cost per mile
Miles paved per year
Years for a full cycle
5- and 10-year projections

AI EXPLAINS

Charts for decision makers
Funding scenarios
Plain-English executive summary
Assumptions clearly stated
Numbers ready to verify

RAW DATA → CALCULATIONS → CLEAR STORY

17

WHAT HAPPENS IF WE CHANGE THE BUDGET?

Use scenarios to show what each funding level produces.

\$500K

~4.0 mi/yr

~32 yr cycle

\$750K

~6.0 mi/yr

~21 yr cycle

\$1.0M

~8.0 mi/yr

~16 yr cycle

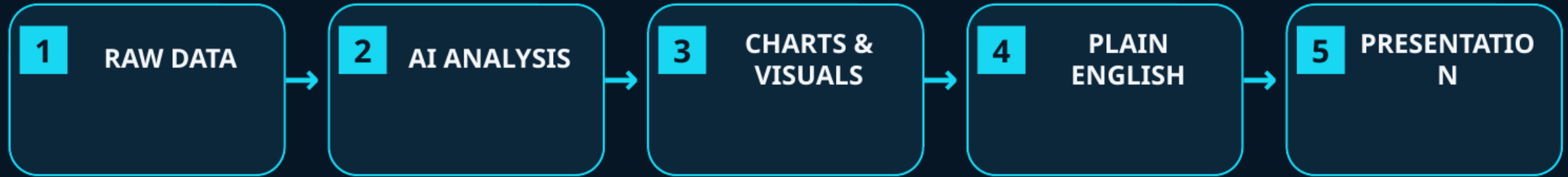
The point is not to have AI choose a budget. The point is to show, consistently and transparently, what each scenario buys.

CHANGE THE NUMBERS. SEE THE IMPACT IN SECONDS.

18

TURN IT INTO A TOWN BOARD PRESENTATION

Use AI to package verified data into a clear, professional briefing.



INCLUDE

Executive summary
Verified charts
Funding scenarios

EXPLAIN

Assumptions
Long-term needs
What each option produces

DELIVER

Clean slides
Talking points
Consistent numbers

SHOW WHAT EACH FUNDING LEVEL BUYS.

19 WHAT AI SHOULD NOT BE USED FOR

AI is a tool. Keep professional judgment, official sources, and sensitive information under human control.

DON'T RELY ON AI FOR

- Exact weather predictions
- Real-time safety-critical decisions
- Legal or regulatory advice
- Personnel or disciplinary decisions
- Confidential or sensitive information
- Unverified facts

DO USE AI FOR

- Organizing and summarizing
- Historical storm and salt analysis
- Drafting communications
- Charts and presentations
- "What-if" scenarios
- Research starting points

VERIFY IMPORTANT DETAILS BEFORE YOU ACT ON THEM.

20

10 PRACTICAL PROMPTS YOU CAN USE TOMORROW

Copy them, customize them, and replace the bracketed information with your own.

1 SUMMARIZE A MEETING

"Turn these meeting notes into decisions, action items, and owners."

2 ANALYZE A STORM

"Analyze this storm data and summarize salt, labor, costs, and lessons."

3 COMPARE WEATHER MODELS

"Compare these forecasts; show agreement, disagreement, and uncertainty."

4 DRAFT A RESIDENT EMAIL

"Draft a professional response using these facts and our normal response time."

5 CREATE A PRESS RELEASE

"Create a short public notice from these project facts."

6 BUILD A PAVING SUMMARY

"Calculate miles/year and years for a full paving cycle from these inputs."

7 COMPARE FUNDING SCENARIOS

"Compare \$500K, \$750K, and \$1M scenarios using the same assumptions."

8 CREATE A BOARD PRESENTATION

"Turn this verified analysis into a concise Town Board presentation."

9 SUMMARIZE A REGULATION

"Summarize this guidance in plain English and flag items I should verify."

10 IDENTIFY NEXT STEPS

"Based on this analysis, list practical next steps, priorities, and questions."

THE RIGHT PROMPT TURNS AI INTO A PRACTICAL EVERYDAY TOOL.

HighwAI

AN INTRO TO AI FOR
HIGHWAY SUPERINTENDENTS

*Same Roads.
New Tools.
Brighter Results.*

YOU ALREADY KNOW HIGHWAYS. AI JUST GIVES YOU ANOTHER TOOL.

SAME COMMITMENT. MORE INSIGHTS. STRONGER DECISIONS.
BETTER ROADS FOR OUR COMMUNITIES.



START SMALL.

Try a few prompts.
Learn what works
for your department.



ASK BETTER QUESTIONS.

The better the input,
the better the results.



VERIFY THE RESULTS.

Use your experience,
professional judgment,
and official sources.



KEEP YOUR JUDGMENT IN THE DRIVER'S SEAT.

AI is a tool to support you
— not replace you.



NICHOLAS DeVITO

Highway Superintendent
Town of Somers, New York



914-610-1701



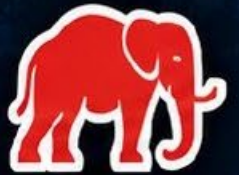
ndevito@somersny.gov

PRESIDENT

Westchester and Putnam
Association of Town
Superintendents of Highways



“The same dedication to
safe, well-maintained roads —
now with a new tool to help us
do it even better.”



TOWN OF
SOMERS
HIGHWAY DEPARTMENT