

**Attachment A**  
**County Road Maintenance Survey**

# County Road Maintenance Survey

County: \_\_\_\_\_ Name of respondent: \_\_\_\_\_

Job Title: \_\_\_\_\_

Please choose the best answer for each question. You may choose more than one answer, if applicable.

1. Size of your Road Network:
  - ☐ Less than 400 miles
  - ☐ 400 – 800 miles
  - ☐ 800 – 1200 miles
  - ☐ Over 1200 miles
  - ☐ \_\_\_\_\_ miles
2. Road Network that is asphalt surfaced:
  - ☐ \_\_\_\_\_ miles, or
  - ☐ \_\_\_\_\_ % of roads
3. What is the asphalt surface structure of these roads?
  - ☐ Hot Mix
  - ☐ Two-Course Surface Treatment / Seal Coat
  - ☐ Superpave Asphalt Mixtures
4. What maintenance functions do you use to repair and maintain roads?
  - ☐ Pothole patching
  - ☐ Edge patching
  - ☐ Full Depth Reclamation / Repair
  - ☐ Remove portions of pavement and repave
  - ☐ Seal Coat (emulsion and aggregate)
  - ☐ Seal Coat (AC and aggregate)

- ☐ Hot Mix overlay
  - ☐ Micro-surfacing
  - ☐ Liquid Asphalt / Sand surfacing
  - ☐ Permeable Friction Cover
  - ☐ Fog Seal
  - ☐ Striping
5. Do you buy or produce these road construction and maintenance materials:
- ☐ Crushed and graded caliche base material
  - ☐ Pit-run caliche base material
  - ☐ Crushed & graded gravel
  - ☐ Pit-run gravel
  - ☐ Reclaimed Asphalt Pavement (RAP)
6. Seal Coats – What asphalt product(s) do you prefer?
- ☐ Asphalt Cement (AC)
  - ☐ AC with Tire Rubber (such as AC-20TR)
  - ☐ AC with Polymer (such as AC-20XP)
  - ☐ Emulsified Asphalt
  - ☐ Polymer-Modified or Specialty Emulsified Asphalt
  - ☐ Other: \_\_\_\_\_
7. Seal Coats – what aggregate(s) do you prefer?
- ☐ Graded aggregate (Types A, B, C, D)
  - ☐ Lightweight Aggregate (Type L)
  - ☐ Precoated, graded aggregate (PA, PB, PC, PD)
8. Hot Mix overlay – What Type asphalt mix do you use: \_\_\_\_\_
9. Patching materials – do you buy and use:
- ☐ Hot-Mix Asphalt
  - ☐ Hot-Mix Cold-Laid Asphalt (Cold Mix)
  - ☐ Limestone Rock Asphalt (LRA)
  - ☐ Asphalt Concrete Patching Material (Bagged)
10. Do you patch . . .

- ☐ Manually
  - ☐ With grader or loader
  - ☐ With patching truck
11. When patching, do you tack the surface with prime or emulsion prior to patching?
- ☐ Yes
  - ☐ No
12. When patching (pothole / edge), do you compact the patch . . .
- ☐ With steel-wheel roller
  - ☐ With pneumatic roller
  - ☐ With equipment or truck tires
  - ☐ With hand operated compactor
  - ☐ Do not compact
13. Crack Sealing:
- ☐ Hot-Applied Sealants
  - ☐ Cold-Applied Sealants
  - ☐ Do not Crack Seal
14. Right-of-Way Maintenance:
- ☐ Roadside Mowing
  - ☐ Right-of-Way cleanup
  - ☐ Herbicide Treatment
  - ☐ Motorgrader blading
  - ☐ Ditching Excavator
  - ☐ Tree & Debris Removal
15. What traffic control do you utilize during maintenance operations?
- ☐ A Traffic Control plan in accordance with TMUTCD
  - ☐ Cones and barricades
  - ☐ Flaggers
  - ☐ Pilot car
  - ☐ Directions from workers at the maintenance site
  - ☐ No formal Traffic Control

16. Striping – do you utilize . . .
- ☐ Centerline stripes
  - ☐ Lane stripes
  - ☐ Edge stripes
  - ☐ No striping on any roads
17. Do you contract out any of your maintenance functions? \_\_\_\_\_  
If yes, which functions? \_\_\_\_\_
18. How do you evaluate / measure pavement condition?
- ☐ Qualitative descriptions (Excellent, Good, Fair, Poor)
  - ☐ Quantitative metrics (such as Pavement Condition Index or PCI)
  - ☐ Other method(s): \_\_\_\_\_
19. What margin of error would you consider acceptable for a pavement condition evaluation?
- ☐ 5% or less
  - ☐ 5 – 10%
  - ☐ 10 – 15%
  - ☐ Don't know / not sure.
20. Would you consider utilizing new technology, such as AI tools and/or aerial imagery, for pavement condition evaluation?
- ☐ Yes
  - ☐ Possibly
  - ☐ No
21. What determines or initiates the need for pavement repair?
- ☐ Citizen complaints
  - ☐ In-house staff “windshield” survey
  - ☐ Formal evaluations by staff using standard procedures (ie PCI)
  - ☐ Formal evaluations by consultants using standard procedures
  - ☐ Other methods: \_\_\_\_\_

**Attachment B**  
**Survey Response Spreadsheet**

## Survey Responses Spreadsheet

County	Name	Roads (mi.)	Asph Surf	Pavement Construction		Surface Repairs	
Waller	Ross McCall	400 – 800	85%		2 Course / SC	Full Depth Recl	Remove pvmt & repave
Kerr	Charlie Hastings	400 – 800	100%		2 Course / SC	Full Depth Recl	Remove pvmt & repave
Brazoria	Matt Hanks	Over 1200	83%	Hot Mix		Full Depth Recl	Remove pvmt & repave
Johnson	Colt Friedrich, P.E.	800 – 1200	90%	Hot Mix	2 Course / SC	Full Depth Recl	Remove pvmt & repave
Reeves	Jaime Mendoza	400 – 800	60%		2 Course / SC	Full Depth Recl	Remove pvmt & repave
Travis	Brian Burk	Over 1200	98%	Hot Mix	2 Course / SC	Full Depth Recl	Remove pvmt & repave
Guadalupe	Barry Black, P.E.	400 – 800	100%		2 Course / SC	Full Depth Recl	Remove pvmt & repave
McLennan	Amy Burlarley-Hyland, P.E.	800 – 1200	70%		2 Course / SC	Full Depth Recl	Remove pvmt & repave
Tarrant	Joe Trammel	Under 400	95%	Hot Mix		Full Depth Recl	Remove pvmt & repave
Galveston	Lee Crowder	Under 400	90%	Hot Mix	2 Course / SC	Full Depth Recl	Remove pvmt & repave
Dallas	Lissa Shepard	400 – 800	90%	Hot Mix	2 Course / SC	Full Depth Recl	Remove pvmt & repave
Karnes	Wayne L. Gisler, P.E.	400 – 800	80%		2 Course / SC	Full Depth Recl	Remove pvmt & repave
Grimes	Jonathan Steiber	400 – 800	40%	Hot Mix	2 Course / SC	Full Depth Recl	Remove pvmt & repave
Tarrant	Joseph Jackson	Under 400	95%	Hot Mix		Full Depth Recl	Remove pvmt & repave
Kendall	Don L Evans	400 – 800	75%		2 Course / SC	Full Depth Recl	Remove pvmt & repave
Howard	Brian Klinksiek, P.E.	400 – 800	70%		2 Course / SC	Full Depth Recl	Remove pvmt & repave
Lubbock	Jennifer Davidson	Over 1200	26%	Hot Mix	2 Course / SC	Full Depth Recl	Remove pvmt & repave
Chambers	Robert L. Hall, Jr. RPLS	400 – 800	75%		2 Course / SC	Full Depth Recl	Remove pvmt & repave
Glasscock	Don W. Bonifay, P.E.	Under 400	85%		2 Course / SC	Full Depth Recl	Remove pvmt & repave

## Survey Responses Spreadsheet

Pavement Surface Treatment				Maintenance & Construction Materials			
Seal Coat (emuls / aggr)	Seal Coat (AC / aggr)	Hot Mix overlay		Cr. Base	Pit-run base	Gravel	Pit-run gravel
Seal Coat (emuls / aggr)				Cr. Base	Pit-run base	Gravel	
Seal Coat (emuls / aggr)	Seal Coat (AC / aggr)	Hot Mix overlay		Cr. Base	Pit-run base	Gravel	RAP
Seal Coat (emuls / aggr)				Cr. Base	Pit-run base		RAP
Seal Coat (emuls / aggr)	Seal Coat (AC / aggr)	Hot Mix overlay		Cr. Base	Pit-run base	Gravel	Pit-run gravel
Seal Coat (emuls / aggr)							
Seal Coat (emuls / aggr)	Seal Coat (AC / aggr)	Hot Mix overlay	Asph / Sand			Gravel	RAP
							RAP
Seal Coat (emuls / aggr)		Hot Mix overlay				Gravel	RAP
Seal Coat (emuls / aggr)		Hot Mix overlay					
Seal Coat (emuls / aggr)	Seal Coat (AC / aggr)	Hot Mix overlay	Micro-surf	Cr. Base		Gravel	RAP
Seal Coat (emuls / aggr)				Cr. Base		Gravel	Pit-run gravel
Seal Coat (emuls / aggr)						Gravel	Pit-run gravel
Seal Coat (emuls / aggr)		Hot Mix overlay	Micro-surf			Gravel	RAP
Seal Coat (emuls / aggr)	Seal Coat (AC / aggr)	Hot Mix overlay				Gravel	RAP
	Seal Coat (AC / aggr)			Cr. Base		Gravel	RAP
Seal Coat (emuls / aggr)							
Seal Coat (emuls / aggr)		Hot Mix overlay	Micro-surf			Pit-run base	
Seal Coat (emuls / aggr)		Hot Mix overlay		Cr. Base		Gravel	RAP
	Seal Coat (AC / aggr)			Cr. Base		Gravel	



## Survey Responses Spreadsheet

Seal Coat										Hot Mix AC		Patching		Patching Materials	
AC	AC-TR	AC-XP	Emuls Asph	Polymer/Emuls Asph	Gr. Aggr		Precoat Aggr	D		Potholes	Edges	Hot-Mix	Cold-Mix		
AC			Emuls Asph		Gr. Aggr					Potholes	Edges			LRA	
AC			Emuls Asph		Gr. Aggr					Potholes	Edges	Hot-Mix	Cold-Mix		Bag
AC		AC-XP	Emuls Asph	Polymer/Emuls Asph	Gr. Aggr			D, A, B over D		Potholes	Edges	Hot-Mix	Cold-Mix		Bag
			Emuls Asph		Gr. Aggr			n/a		Potholes			Cold-Mix		
			Emuls Asph		Gr. Aggr			D		Potholes	Edges	Hot-Mix	Cold-Mix		Bag
		AC-XP			Gr. Aggr			D		Potholes	Edges				
AC					Gr. Aggr					Potholes	Edges	Hot-Mix	Cold-Mix		Bag
			Emuls Asph	Polymer/Emuls Asph	Gr. Aggr	LW Aggr		B, C, & D		Potholes	Edges	Hot-Mix	Cold-Mix		Bag
			Emuls Asph		Gr. Aggr			D		Potholes	Edges				Bag
AC		AC-XP		Polymer/Emuls Asph	Gr. Aggr	LW Aggr	Precoat Aggr	B		Potholes	Edges	Hot-Mix			
				Polymer/Emuls Asph	Gr. Aggr	LW Aggr	Precoat Aggr	n/a		Potholes	Edges		Cold-Mix		
			Emuls Asph		Gr. Aggr	LW Aggr		n/a		Potholes	Edges		Cold-Mix		
				Polymer/Emuls Asph	Gr. Aggr			D & B		Potholes	Edges	Hot-Mix	Cold-Mix		
AC			Emuls Asph				Precoat Aggr	B & D		Potholes	Edges	Hot-Mix	Cold-Mix	LRA	
	AC-TR	AC-XP					Precoat Aggr			Potholes	Edges			LRA	
			Emuls Asph	Polymer/Emuls Asph	Gr. Aggr			D, City D & C		Potholes	Edges	Hot-Mix	Cold-Mix		
			Emuls Asph	Polymer/Emuls Asph	Gr. Aggr			C, repairs D		Potholes	Edges	Hot-Mix	Cold-Mix		
	AC-TR						Precoat Aggr			Potholes	Edges			LRA	

Patching Operations											Crack Sealing		
Manually	Grader/Ldr	Patch Truck	Yes			Truck tires			Hot-Applied Sealants				
	Grader/Ldr		Tack	SW Roller	Pn Roller	Truck tires						No Crack Seal	
Manually	Grader/Ldr	Patch Truck	Tack		Pn Roller			Hand Comp	Hot-Applied Sealants				
Manually	Grader/Ldr	Patch Truck	Tack	SW Roller	Pn Roller	Truck tires		Hand Comp	Hot-Applied Sealants				
Manually		Patch Truck	Tack		Pn Roller							No Crack Seal	
Manually			No	SW Roller		Truck tires		Hand Comp	Hot-Applied Sealants				
Manually			Tack	SW Roller	Pn Roller			Hand Comp	Hot-Applied Sealants				
Manually	Grader/Ldr		Tack			Truck tires			Hot-Applied Sealants				
Manually	Grader/Ldr	Patch Truck	Tack	SW Roller	Pn Roller	Truck tires		Hand Comp	Hot-Applied Sealants				
Manually		Patch Truck	No			Truck tires			Hot-Applied Sealants				
Manually	Grader/Ldr	Patch Truck	Tack		Pn Roller				Hot-Applied Sealants				
Manually	Grader/Ldr		Tack	SW Roller	Pn Roller	Truck tires			Hot-Applied Sealants			No Crack Seal	
Manually		Patch Truck	No					Hand Comp					
Manually		Patch Truck	Tack	SW Roller		Truck tires		Hand Comp	Hot-Applied Sealants				
Manually	Grader/Ldr	Patch Truck	Tack	SW Roller	Pn Roller	Truck tires		Hand Comp	Hot-Applied Sealants				
	Grader/Ldr	Patch Truck	Tack		Pn Roller	Truck tires						No Crack Seal	
		Patch Truck	Tack		Pn Roller			Hand Comp				No Crack Seal	
Manually	Grader/Ldr	Patch Truck	Tack	SW Roller		Truck tires			Hot-Applied Sealants	Cold-Applied Sealants		No Crack Seal	



## Survey Responses Spreadsheet

Right-of-Way Work					Traffic Control / Safety				
Mowing		Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	Workers
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	
Mowing		Tree & debris removal	Herbicide		Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator		Cones & Barr.	Flaggers	
Mowing		Tree & debris removal				TMUTCD Plan	Cones & Barr.	Flaggers	
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	
Mowing		Tree & debris removal			Ditch excavator		Cones & Barr.	Flaggers	
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	Workers
Mowing		Tree & debris removal			Ditch excavator		Cones & Barr.	Flaggers	
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	Workers
Mowing		Tree & debris removal			Ditch excavator		Cones & Barr.	Flaggers	
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	Workers
Mowing		Tree & debris removal			Ditch excavator		Cones & Barr.	Flaggers	
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	Workers
Mowing		Tree & debris removal			Ditch excavator		Cones & Barr.	Flaggers	
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	Workers
Mowing		Tree & debris removal			Ditch excavator		Cones & Barr.	Flaggers	
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	Workers
Mowing		Tree & debris removal			Ditch excavator		Cones & Barr.	Flaggers	
Mowing	ROW cleanup	Tree & debris removal	Herbicide	MG blading	Ditch excavator	TMUTCD Plan	Cones & Barr.	Flaggers	Workers
Mowing		Tree & debris removal			Ditch excavator		Cones & Barr.	Flaggers	

## Survey Responses Spreadsheet

Striping		Do you contract out any of your maintenance functions? Which ones?
Centerline	Lanes	HMA mill & overlay, some seal coats, vegetation management, some hauling, some ditch maintenance
Centerline	Edges	Striping
Centerline	Edges	Some - mowing, herbicide, striping
		occasionally use contractors to reconstruct a road
Centerline		n/a
Centerline	Lanes	hot mix overlay, some top, some herbicide, sidewalk
Centerline	Edges	No
Centerline	Lanes	Litter, some paving
Centerline	Edges	Concrete work
Centerline		Paving, Guardrails, striping
Centerline	Lanes	Some as needed
Centerline	Edges	Outsource a significant portion of our overlays, concrete drainage repairs, and roadside spraying.
Centerline		Bridge repair, mowing, herbicide, striping
Centerline	Lanes	Concrete repair (road, headwall, wingwall)
Centerline	Lanes	Seal Coat
Centerline	Edges	Inverted Prime, Sealcoat, Striping
Centerline	Lanes	Microsurfacing
Centerline		Hot Mix, concrete
		Seal Coating
		No striping



## Survey Responses Spreadsheet

Road Evaluations				Impetus for Maintenance			
Qualitative	Quantitative (PCI)	Other methods	not sure	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative	Quantitative (PCI)		10 – 15%	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
			10 – 15%	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative			not sure	Possibly	Citizen complaints	"Windshield" surveys	
Qualitative			5 – 10%	AI/Aerial - Yes	Citizen complaints		Staff evals (like PCI)
Qualitative	Quantitative (PCI)		5 – 10%	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	Consultants
		Other methods	5% or less	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	
		Other methods	10 – 15%	Possibly	Citizen complaints	"Windshield" surveys	
	Quantitative (PCI)		not sure	Possibly	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative		Other methods	not sure	AI/Aerial - Yes			Consultants
	Quantitative (PCI)		10 – 15%	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative			10 – 15%	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative			10 – 15%	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative	Quantitative (PCI)		not sure	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
		Other methods	5 – 10%	Possibly	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
	Quantitative (PCI)		not sure	AI/Aerial - Yes	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative		Other methods	5 – 10%	Possibly	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative	Quantitative (PCI)		not sure	Possibly	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative		Other methods	not sure	Possibly	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative			5 – 10%	Possibly	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative			not sure	Possibly	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)
Qualitative			5 – 10%	Possibly	Citizen complaints	"Windshield" surveys	Staff evals (like PCI)

**Attachment C**  
**County Officials Responding to the Survey**

## County Officials Responding to Survey

County	Respondent	Job Title	Job Description
Brazoria	Matt Hanks	County Engineer	Platting, development planning, engineering for road improvements, assist County Judge and Commissioners in road network planning and improvements.
Chambers	Robert L. Hall, Jr. RPLS	County Engineer - Retired	Prepares plans and specs for all road construction and improvements. Oversees platting and other engineering related functions.
Dallas	Lissa Shepard	Floodplain Manager	Over the Floodplain Permitting in Dallas County. Also assists with any associated work on and around the county road system. Assists the county commissioners when needed.
Galveston	Lee Crowder	Road Administrator	Supervises all road building, maintenance and improvements. Plans and coordinates all work by county employees and oversees all contract work associated with the county road network.
Glasscock	Don W. Bonifay, P.E.	County Engineer	Design, Plan & Specification preparation for road construction and maintenance, Supervise seal coat and road improvements.
Grimes	Jonathon Steiber	County Engineer	All engineering related functions for the county including advising and assisting the county commissioners with the maintenance and operation of the county's road system.
Guadalupe	Barry Black	Assistant County Engineer	Assistant to the County Engineer - engineering, permitting, platting, land development, road system.
Howard	Brian Klinksiek	Road & Bridge Engineer	Operates as the de facto County Engineer (by contract as a consultant) to maintain and improve and upgrade the county road network.
Johnson	Colt Friedrich, P.E.	County Engineer	Performs all duties associated with land development, platting, floodplain management and oversees all road improvement programs.
Karnes	Wayne L. Gisler, P.E.	Road & Bridge Engineer	Operates and supervises the Road & Bridge employees. Maintains and improves the road system.
Kendall	Don L. Evans	Road & Bridge Supervisor	Supervises the road employees of the county to maintain and improve the road system. Oversees all operations of the road crews.
Kerr	Charlie Hastings	County Engineer	County Engineer - handles all road-related matters - construction and maintenance of roads and structures (bridges, culverts, etc.) Permits and



## County Officials Responding to Survey

Lubbock	Jennifer Davidson	DPW, Road Superintendent	platting and delvelopment.
McLennan	Amy Burlarley-Hyland, P.E., CFM	Interim County Engineer	Over all Public Works functions, including maintenance and construction of county roads and bridges. Platting and land development.
Reeves	Jaime Mendoza	Maintenance Foreman	In role of Interim County Engineer - Platting, land development, road design, advise and consult with commissioners on road issues, traffic control.
			Supervises all road maintenance, assists Commissioners with planning and improvements to the road system. Works with consultants and contractors.
Tarrant	Joseph Jackson	County Engineer	Serves as County Engineer for Tarrant County. Works as a consultant to the Precinct Commissioners and their maintenance staffs. Oversee permitting for the county and land development, platting and planning.
Tarrant	Joe Trammel	Director of Field Operations	Manages and oversees maintenance of Tarrant County Precinct 1 roads.
Travis	Brian Burk	Engineer	Assists with planning and coordination of road system improvements.
Waller	Ross McCall	County Engineer	Serves as Engineer in the County Engineer's office. Design and construction management of road improvement programs.
			All engineering functions for the County. Permitting and inspections associated with development as well as management of the road system - maintenance and improvements.