



6 FEB 2017

“THE ROAD TO EXCESS”

**SANRAL’S HIGH COST OF ROAD CONSTRUCTION IN SOUTH AFRICA
& THE OVERPAYMENT OF ALMOST R10BN ON GAUTENG’S FREEWAY UPGRADE**

WHO IS OUTA?

OUTA is a proudly South African non-profit **Civil Action Organisation**, comprising of and supported by people who are passionate about improving the prosperity of our nation.

The conduct of excessive costs related to state controlled capital expenditure projects is a grave problem in South Africa.

Our nation has become poorer as a result of this growing problem.

OUTA's mandate is to expose and challenge the abuse of authority, be it through maladministration and / or corruption.

GAUTENG'S GROWING CONGESTION

- Gauteng commuting has been problematic.
- Apartheid developmental policies of segregation pushed the poor far from places of work.
- Public transport infrastructure insufficient to cope.
- Roads Transport (Mini-Bus Taxi's and Cars) have become the main method of commuting.
- Gauteng residents have become captive to the freeway network.
- Congestion buildup required relief from early 2000's.

TAKING ACTION TO REDUCE CONGESTION

- Gautrain – an alternative to road transport:
 - Construction started 2006. First link Opened 2010
 - Relatively narrow corridor – N to S (Tshwane to Joburg)
 - Costs: *In 2000 = R4bn; 2003 = R7bn; 2005 = R20bn; 2010 = 26bn*
- Gauteng Freeway Improvement Project (GFIP)
 - 2008 to 2011
 - Cost of road: *2005 = R4,6bn (350km), 2012 = R17,9bn (201 km)*
 - Subjected to e-Toll finance mechanism / public participation?

THE COST OF E-TOLLS

- ETC – Contract awarded in excess of R8bn over 5 years.
- Bonds raised to cover GFIP < R20,6bn.
 - R17,9bn for road upgrade.
 - R2,7bn for e-Toll infrastructure and other.
- E-Toll decision backlash: less than 20% compliance today.
- **However, the costs of the GFIP project at R17,9bn for between 185 and 201km (\pm R92 million / km) been relatively unchallenged.**

OUTA RAISES CONCERNS AT GFIP COST FEB 2016 BENCHMARKING STUDY

- In Feb 2016, OUTA releases position paper:
 - Society's Odious GFIP Debt, courtesy of SANRAL.
- Benchmarks international costs of road construction case studies to the cost of GFIP:
 - Claims that rest of world builds 2-3 roads for each 1 of SANRAL's.
 - Provides rough estimate that SANRAL has grossly overpaid for GFIP by as much as R10bn.
- SANRAL's retort was to dismiss OUTA's study.

SANRAL'S RETORT – APRIL 2016

- 23 March 2016: 28 Page letter from Werksmans > OUTA claims and inferences were actionable. Demanded answers to 420 questions.
- OUTA indicated interest in responding directly with SANRAL.
- In April 2016, SANRAL's press conference denounced OUTA's benchmarking exercise.
- They cited an "incorrect" reference to the "Delft Impact Study" and implied that OUTA got its "*billions mixed up with millions*".
- Their claim was wrong & OUTA's reference was in fact correct.
- What SANRAL did not do, was to make a strong and resounding claim that R17,9bn was fair value for the GFIP.
- SANRAL's reaction set OUTA off on a project to determine the actual extent of the excess involved in GFIP construction cost.

OUTA'S UPDATED POSITION PAPER

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ORGANISATION UNDOING TAX ABUSE

POSITION PAPER

**The Road to Excess:
A Paper on High Pricing, Collusion and
Capture of National Road Construction**

A revision and update of OUTA's previous position paper
(dated GFIP Construction Costs and Sanral's Odious Debt- Feb 2016)
on the inflated cost of road construction in South Africa,
more specifically on projects managed by the
South African National Roads Agency Limited (SANRAL)

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OUTA'S RESEARCH

- The past year saw OUTA's team gather additional information on the GFIP project.
 - Tender documents of Work Package G – a good benchmark.
 - Numerous presentations (SANRAL & Construction Companies) with significant information on the projects.
 - Engagement and input from highly experienced civil engineers and Quantity Surveyor.
 - More international and local case studies for improved benchmarking > more confirmation of inflated GFIP cost.

OVERVIEW

- Inconsistencies in SANRAL's reporting on GFIP cost & Length

Distance and cost of GFIP as reported by SANRAL over time

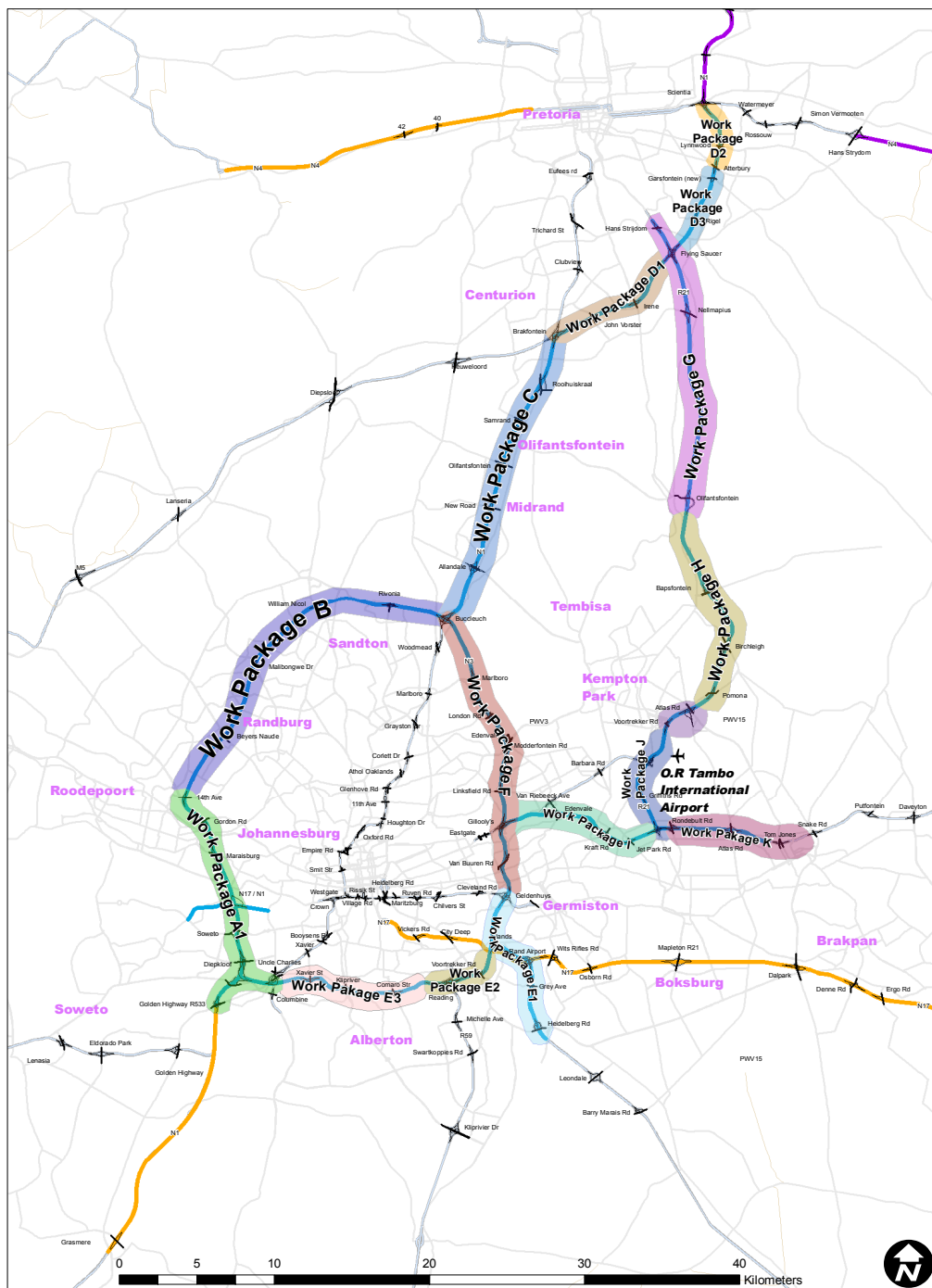
Source	Date	Distance	Cost
SANRAL's Declaration of Intent (2005 – 2008)	2005	340km	R4.6 billion
GFIP: Road Design Alternatives and Material Consumption Estimates	2008	180km	Unknown
Gauteng Freeway Improvement Project: Update on Phase 1 Construction	2009	185km	R14,9 billion
Gauteng Freeway Improvement Project GFIP: Current and Future Phases	2011	201km	Unknown
SANRAL Construction Costs	2011	201km	R17,9 billion
Nazir Alli presentation: Bidding Procedures, Monitoring and Management of Public Works in Transportation	2012	184km	R11,4 billion

SANRAL'S COST BREAKDOWN PER PROJECT

Work Package	Project Description (Including Road, Structure works, Lighting & markings)	Distance (km)	Amount (excl vat)	Contract Price Adjustment	VAT	Total Actual Cost
A1 & A2	N1 - 20 (From Golden Highway to 14th Ave) N12 - 18 (From Uncle Charlies - Diepkloof)	18	1,117,094,584	122,880,404	173,596,498	1,413,571,487
B	N1 - 20 (From 14th Avenue - Buccleuch)	21	1,675,916,119	239,656,005	268,180,097	2,183,752,221
C	N1 - 20&21 (From Buccleuch - Brakfontein)	23	1,492,478,366	213,424,406	238,826,388	1,944,729,160
D1	N1 - 21 (From Brakfontein - Flying Saucer)	10	1,046,331,801	149,625,448	167,434,015	1,363,391,263
D2	N1 - 21 (Atterbury - Scientia)	5	596,218,965	85,259,312	95,406,959	776,885,235
D3	N1 - 21 (Flying Saucer - Atterbury)	6	263,008,100	27,000,000	40,601,134	330,609,234
E1	N3 - 12 (Heidelberg - Geldenhuys)	12	1,823,715,546	300,913,065	297,448,005	2,422,076,616
E2	N12 - 18 (From Reading - Elands)	4				
E3	N12 - 18 (Uncle Charlies - Reading)	12	527,526,704	52,752,671	81,239,112	661,518,487
F	N3 - 12 (Geldenhuys - Buccleuch)	18	1,149,695,508	164,406,458	183,974,275	1,498,076,241
G	R21 - 2 (Olifantsfontein - Hans Strydom)	17.6	631,000,000	69,410,000	98,057,400	798,467,400
H	R21 - 1 (Benoni - Olifantsfontein)	12	535,427,551	58,897,031	83,205,441	677,530,023
I	N12 - 19 (Gillooly's - Rietfontein)	10	1,102,283,849	125,000,000	171,819,739	1,399,103,587
J	R21 - 1 (Rietfontein - Pomona)	5	348,002,527	34,800,000	53,592,354	436,394,880
K	N12 - 19 (Rietfontein - Tom Jones)	9.5	701,669,523	55,000,000	105,933,733	862,603,256
?	Tom Jones - Putfontein (distance est.)	6	511,657,325	49,483,720	78,559,746	639,700,791
?	Pomona to Benoni (distance est.)	4	76,616,543	3,830,827	11,262,632	91,710,002
TOTAL without Barriers (17 Projects)		193	13,598,643,010	1,752,339,346	2,149,137,530	17,500,119,886
Median Barriers	Precast Concrete Barriers (Tender 1)	127	230,076,364	13,804,582	34,143,332	278,024,278
	Precast Concrete Barriers (Tender 2)		86,165,638	6,592,194	12,986,096	105,743,928
TOTAL with Barriers (19 Projects)		193	13,914,885,011	1,772,736,122	2,196,266,959	17,883,888,092

GFIP OVERVIEW

- The GFIP – A multi package project.
- 2008 to 2011/12.
- Major construction companies & some smaller entities plus JVs.
- Roughly 27% increase in surface area.
- Thus 73% rehabilitation of existing road surface area.
- Some packages had more structural (bridge) work than others.
- Some packages had more interchange work than others.



OUTA'S ANALYSIS: PACKAGE G "BASE CASE"

- Work Package "G" – R21 Olifantsfontein to Solomon Mahlangu
 - (Solomon Mahlangu Interchange previously Hans Strydom) .
- OUTA obtained the full tender documents.
- 17,6 km long: 2-lanes upgraded to 4-lanes (each way).
- Had highest ratio of new lane construction (38%) to re-habilitation (62%). Why not 50:50? Lanes not as wide... etc.
- Little structural work in this package.
- New lane construction is much more expensive than rehabilitation.
Thus package "G" and "H" had higher **road work** elements than others.

OUTA's WORK PACKAGE "G" COST CALCULATION (ZAR)

SCHEDULE	Package G
TOTAL SCHEDULE B: Structures	16,508,420
TOTAL SCHEDULE D: Govt requirements for BBEE	1,040,000
TOTAL SCHEDULE E: Electrical	37,520,883
TOTAL SCHEDULE F: Ultra thin friction course	45,260,000
TOTAL SCHEDULE H: Alternative Road works	486,354,997
TOTAL SCHEDULES	586,684,300
Contract Price Adjustment	29,598,222
TOTAL (Excluding VAT)	616,282,522
ADD 14% VAT	86,279,553
TOTAL WORKPACKAGE COST	702,562,075
Length of the Work Package (km)	17.6
Ave. Cost / km (Including Lighting)	39,918,300
SANRAL's PAID TENDER	798,467,400
SANRAL's Cost per KM for Work Package	45,367,466
COST VARIANCE: Overpriced / (Underpriced)	95,905,325
PERCENTAGE VARIANCE	13.7%

Package "G" Overview

- Applying Quantities and indices as per tender docs & material / input costs.
- Tenders asked for costing within & without more expensive UTCRCP (Ultra Thin Continuously Reinforced Concrete Paving).
- The opinion without was used.
- Cost of Package G: R703 million
- Ave R40 mil / kilometer.
- A good base for other packages, excluding structural work.
- Lowest variance.

METHODOLOGY 1

Using Work Package G as a "Base Case" / km cost for G:

39,918,300

Work Package	Project Description	Distance (km)	OUTA Indicative Amount (Incl VAT)	SANRAL's Price Paid (Incl VAT)	Value Variance	% Variance
A	N1 - 20 (From Golden Highway to 14th Ave) N12 - 18 (From Uncle Charlies - Diepkloof)	18	718,529,400	1,413,571,487	695,042,087	97%
B	N1 - 20 (From 14th Avenue - Buccleuch)	21	838,284,300	2,183,752,221	1,345,467,921	161%
C	N1 - 20&21 (From Buccleuch - Brakfontein)	23	918,120,900	1,944,729,160	1,026,608,260	112%
D1	N1 - 21 (From Brakfontein - Flying Saucer)	10	399,183,000	1,363,391,263	964,208,263	242%
D2	N1 - 21 (Atterbury - Scientia)	5	199,591,500	776,885,235	577,293,735	289%
D3	N1 - 21 (Flying Saucer - Atterbury)	6	239,509,800	330,609,234	91,099,434	38%
E1	N3 - 12 (Heidelberg - Geldenhuys)	12	479,019,600	2,422,076,616	1,783,383,816	279%
E2	N12 - 18 (From Reading - Elands)	4	159,673,200			
E3	N12 - 18 (Uncle Charlies - Reading)	12	479,019,600	661,518,487	182,498,887	38%
F	N3 - 12 (Geldenhuys - Buccleuch)	18	718,529,400	1,498,076,241	779,546,841	108%
G	R21 - 2 (Olifantsfontein - Hans Strydom)	17.6	702,562,080	798,467,400	95,905,320	14%
H	R21 - 1 (Benoni - Olifantsfontein)	12	479,019,600	677,530,023	198,510,423	41%
I	N12 - 19 (Gillooly's - Rietfontein)	10	399,183,000	1,399,103,587	999,920,587	250%
J	R21 - 1 (Rietfontein - Pomona)	5	199,591,500	436,394,880	236,803,380	119%
K	N12 - 19 (Rietfontein - Tom Jones)	9.5	379,223,850	862,603,256	483,379,406	127%
?	Tom Jones - Putfontein	6	239,509,800	639,700,791	400,190,991	167%
?	Pomona to Benoni	4	159,673,200	91,710,002	- 67,963,198	-43%
TOTAL without median barriers (17 Projects)		193	7,708,223,730	17,500,119,886	9,791,896,156	127%
Median Barriers	Precast Concrete Barriers (Tender 1)	127	278,024,278	278,024,278	-	
	Precast Concrete Barriers (Tender 2)		105,743,928	105,743,928	-	
TOTAL with Barriers (19 Projects)			8,091,991,936	17,883,888,092	9,791,896,156	121%

OUTA Obtained a copy of this presentation:

Louw Kannemeyer is a Network Manager at SANRAL

Presented around the time the GFIP tenders were being finalised

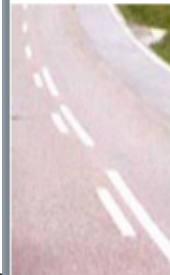
Contained key quantities for some work packages



Gauteng
Freeway Improvement Project

**GFIP: Road Design Alternatives and Material Consumption Estimates
RPF Feedback 6th May 2008**

Louw Kannemeyer



Slide 1



SLIDE 13: SANRAL'S KEY QUANTITIES

PACKAGES: A (1&2), B, C, D(1&2) E(1&2) F

GAUTENG TOLL HIGHWAY PROJECTS		D1	D2	C	F	A1-A2	B	E1	E2	Total
		Brakfontein to N1/R21 I/C	Atterbury to Proefplaas	Buccleuch to Brakfontein	Geldenhuis to Buccleuch	14th Avenue to Uncle Charlies	14th Avenue to Buccleuch	Old Barn to Geldenhuis	Reading to Elands I/C	
Section 2200 Prefabricated Culverts	Concrete	670.00 m3	195.00 m3	1930.00 m3	180.00 m3	312.00 m3	750.00 m3	336.00 m3	825.00 m3	5198.00 m3
	Reinforcing	15.50 t	13.00 t	35.00 t	25.00 t	8.90 t	10.00 t	22.40 t	9.20 t	139.00 t
Section 2300 Open Drains	Concrete	2620.00 m3	2510.00 m3	280.00 m3	4495.00 m3	5785.00 m3	11740.00 m3	1540.00 m3	2125.00 m3	31095.00 m3
	Reinforcing	48.40 t	37.00 t	2.50 t	61.60 t	13.50 t	134.00 t	53.00 t	41.50 t	391.50 t
Section 4100 Prime	Prime	160000.00 l	180000.00 l	424400.00 l	24360.00 l	241840.00 l	147000.00 l	77000.00 l	60000.00 l	1314600.00 l
Section 4200 Asphalt	Tack Coat 30% Stable Grade Emulsion	310000.00 l	93600.00 l	1150000.00 l	562342.00 l	424225.00 l	156000.00 l	840000.00 l	140000.00 l	3676167.00 l
	Semi Gap 19mm max AR1							6640.00 t		6640.00 t
	Base 40/50 pen bit. With 26.5mm	159450.00 t	11986.00 t	17320.50 t	64045.00 t	35200.00 t			4221.67 t	292223.17 t
	Continuously Graded	30950.00 t	12130.00 t	26488.00 t	9239.00 t	1180.00 t	44000.00 t	89000.00 t	2875.00 t	215862.00 t
	Semi open grade bitumen rubber						12510.00 t	79000.00 t	16700.00 t	108210.00 t
Structures	Concrete	20391.00 m3	9724.00 m3	32212.00 m3	12672.00 m3	5856.00 m3	26508.50 m3	15962.30 m3	16329.00 m3	139654.80 m3
	Reinforcing	2876.50 t	1359.00 t	3874.00 t	1579.10 t	1568.10 t	4514.20 t	1792.35 t	2814.60 t	20377.85 t
Section 7100 Concrete Pavement	Concrete	5750.00 m3	3075.00 m3	29036.00 m3	16978.00 m3	7623.00 m3	30362.00 m3	1138.00 m3		93962.00 m3
	Reinforcing	400.00 t	270.00 t	1504.00 t	50055.00 t	22.10 t	550.00 t	254.00 t		53055.10 t
BRASO				20831.00 t		116920.00 t	36020.00 t			173771.00 t
UTFC			50000.00 m2							50000.00 m2

Total Concrete	269909.80 m3
Total Reinforcing	73963.45 t
Total Prime	1314600.00 l
Total Tack Coat	3676167.00 l
Total Asphalt	796706.17 t
Total UTFC	50000.00 m2

OUTA'S ANALYSIS – METHODOLOGY 2A

- OUTA's road construction engineers and QS applied their analysis of this information to:-
 - these key quantities,
 - length and width of road surface areas
 - Understanding of higher extent of structural & bridgework on these packages.
 - Applied known costs of material applicable at the time.
 - Adjusted for COLTO standards, P&Gs, Series 3000 (Earthworks) etc.
 - Applied their extensive construction experience.
- Added insights of another presentation by KAS JV on Work Package E1.
- Excluded Work Package F – Steel to Concrete ratio questionable.

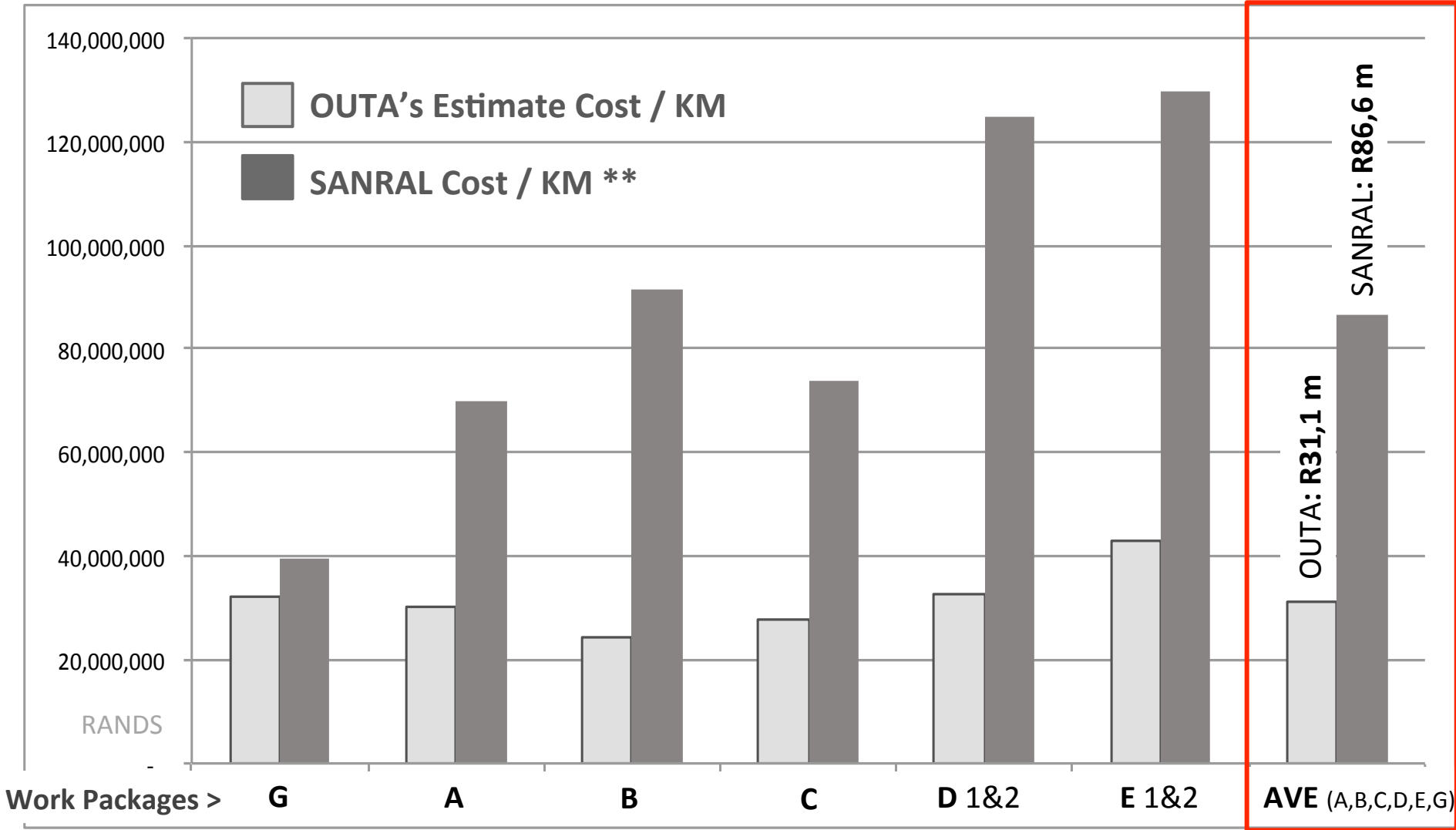
OUTA'S ANALYSIS – METHODOLOGY 2A

OUTA's Calculation of Methodolgy 2(a) for Cost of GFIP: Work Packages A, B, B, D(1&2), E(1&2) and G

SCHEDULE	Package G	Package A	Package B	Package C	Package D1&2	Package E1 + E2	Total
Structures	16,508,420	49,428,973	189,003,552	202,648,672	146,498,436	133,485,246	737,573,300
Govt requirements for BBBEE	1,040,000	1,216,108	1,387,070	1,817,169	1,817,169	1,511,532	8,789,047
Electrical and lighting	37,520,883	23,356,721	27,249,508	29,844,699	19,463,934	26,281,529	163,717,273
BRASO/ UTFC/ Other layers	45,260,000	184,161,777	88,446,763	51,150,320	75,248,898	187,955,400	632,223,157
Road works	486,354,997	338,597,160	395,030,020	558,340,722	391,130,053	468,435,544	2,637,888,496
TOTAL SCHEDULES	586,684,300	596,760,739	701,116,912	843,801,582	634,158,490	817,669,251	4,180,191,273
Contract Price Adjustment	29,598,222.93	25,951,632.63	51,220,972.44	39,458,974.62	29,464,315.48	39,229,953.62	214,924,072
TOTAL with CPA	616,282,522.49	622,712,371.47	752,337,884.78	883,260,556.16	663,622,805.03	856,899,204.96	4,395,115,345
ADD 14% VAT	86,279,553	87,179,732	105,327,304	123,656,478	92,907,193	119,965,889	615,316,148
TOTAL WORKPACKAGE COST	702,562,076	709,892,103	857,665,189	1,006,917,034	756,529,998	976,865,094	5,010,431,493
Length of the Work Package (km)	18	18	21	23	15	16	111
Ave. Cost / km (Including Structures & Lighting)	39,918,300	39,438,450	40,841,199	43,779,001	50,435,333	61,054,068	45,302,274
SANRAL's PAID TENDER	798,467,400	1,413,571,487	2,183,752,221	1,944,729,160	2,140,276,499	2,422,076,616	10,902,873,384
SANRAL's Cost per KM for Work Package	45,367,466	78,531,749	103,988,201	84,553,442	142,685,100	151,379,788	98,579,325
COST VARIANCE: Overpriced / (Underpriced)	95,905,324	703,679,384	1,326,087,033	937,812,126	1,383,746,501	1,445,211,522	5,892,441,890
PERCENTAGE VARIANCE	14%	99%	155%	93%	183%	148%	118%



Work Package Cost per KM for Road works *



* ROAD WORKS Costs are those attributed to all work, less structures, CPA and VAT

** Note: Sanral's figures are their own, pre CPA and less OUTA's estimate of Structure costs. All excl. VAT

OUTA'S ANALYSIS – METHODOLOGY 2B

OUTA's Calculation of Methodolgy 2(b): TOTAL Cost of GFIP

		Using Calculations for Methodology 2(a)	Using Methodology 1	
	SCHEDULE	Work Packages A, B, C, D(1&2), E(1&2), G	Ave G Costs* Applied to Remainder Packages	GFIP TOTAL
OUTA's ESTIMATES	Structures	737,573,300	277,289,421	1,014,862,721
	Govt requirements for BBEE	8,789,047	4,869,091	13,658,138
	Electrical and lighting	163,717,273	175,665,950	339,383,223
	BRASO/ UTFC/ Other layers	632,223,157	211,899,091	844,122,248
	Road works	2,637,888,496	2,077,025,668	4,714,914,164
	TOTAL SCHEDULES	4,180,191,273	2,746,749,221	6,926,940,494
	Contract Price Adjustment	214,924,072	138,573,498	353,497,570
	TOTAL with CPA	4,395,115,345	2,885,322,719	7,280,438,064
	ADD 14% VAT	615,316,148	403,945,181	1,019,261,329
	WORKPACKAGE COST (Excl Barriers)	5,010,431,493	3,289,267,900	8,299,699,393
	Median Barriers (as per Sanral Tender)			383,768,206
TOTAL COSTS (Inclu Median Barriers)			8,683,467,599	
Length of the Work Package (km)	111	82	193	
Ave. Cost / km (Including Structures & Lighting)	45,302,274	39,918,300	44,992,060	
SANRAL's COSTS	SANRAL's PAID TENDER (Excl Barriers)	10,902,873,384	6,597,246,503	17,500,119,886
	Median Barriers (as per Sanral Tender)			383,768,206
	SANRAL'S TOTAL GFIP COSTS (Incl Barriers)			17,883,888,092
	SANRAL's Cost per KM for Work Package	98,579,325	80,063,671	92,662,633
VARIANCE	COST VARIANCE: Overpriced / (Underpriced)	5,892,441,890	3,307,978,603	9,200,420,494
	PERCENTAGE VARIANCE	118%	101%	106%

More Accurate Approach

- Using 2(a) methodology for 111 km of packages with good costing information.
- Combined with Package "G" base case for remainder 82 km packages, and inflating Structures costs.

← SANRAL PAID

← OVER PRICED BY

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* Package G costs adjusted to increase allowance for Structures and Road Works

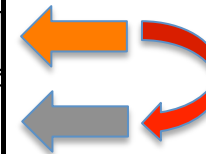
OUTA'S ANALYSIS – METHODOLOGY 3

Methodology 3: Applying Cost / Sq M for Roadworks

ITEMS COSTED	Cost / Sq M Applied	AREA of A, B, C, D(1&2), E(1&2), & G		Remaining 82 km of GFIP		TOTAL GFIP	
		AREA (Sq M)	COST (ZAR)	AREA (Sq M)	COST (ZAR)	AREA (Sq M)	COST (ZAR)
New Road Surface Area	R 1,666	1,182,720	1,970,411,520	761,223.84	1,268,198,919	1,943,944	3,238,610,439
Existing Road Surface Area	R 325	3,193,440	1,037,868,000	2,055,366.16	667,994,002	5,248,806	1,705,862,002
TOTAL		4,376,160	3,008,279,520	2,816,590	1,936,192,921	7,192,750	4,944,472,441
Total per Sq M	R 687						
Lighting			163,717,273		175,665,950.24		339383223
Structures			737,573,300		277,289,421		1,014,862,721
TOTAL			3,909,570,093		2,389,148,292		6,298,718,385
CSI & BBBEE			8,789,047		4,869,090.91		13,658,138.11
Contract Price Adj			214,924,072		138,573,498.26		353,497,569.98
Median Barriers							383,768,205.78
TOTAL			4,133,283,212		2,532,590,881		7,049,642,299
VAT (@ 14%)			578,659,650		354,562,723		986,949,922
TOTAL Including VAT	R 1,117		4,711,942,862	-	2,887,153,605		8,036,592,221
SANRAL PAID >							17,880,000,000
SANRAL's COST / Sq M	R 2,486						2,485.84

Square Meter Surface Calculations: Rehab & New

- Using combination of satellite imagery, tenders, & known information of road widths, OUTA estimated surface area of New and Existing **Road Works**.
- OUTA placed new road construction at R1666 / m2
- Rehabilitation / resurfacing at average of R325 / m2
- Then added earlier costing pertaining to Lighting, Structures, CPA etc.



SUMMARY OF OUTA'S ANALYSIS

3 METHODOLOGIES

SUMMARY AND COMPARISONS OF OUTA'S THREE CALCULATION METHODOLOGIES

METHOD	COST OF GFIP	METHOD DESCRIPTION
Method 1	8,091,991,936	Using Engineers calculation Package G tender documents as (base case) per KM for all packages
Method 2(b)	8,683,467,599	Using Engineers calculation of Key Quantities obtained for Several Work Packages (A, B, C, D, E, G) and applying Package G (base case cost / KM) to remainder of packages (82km)
Method 3	8,036,592,221	Applying the figure of R325/m ² for rehabilitation work(5,248,806 m ²) and R1666/m ² for added surface area (1,943,944 m ²) and adding costs pertaining to structures, lighting and median barriers.
AVERAGE	8,270,683,918	Taking an average of the above three methodologies
SANRAL	17,883,888,092	The actual figure paid by SANRAL for the GFIP
DIFFERENCE % Variance	9,613,204,174 116%	The amount OUTA believe that SANRAL overpaid for the GFIP

VARIOUS ASSESSMENTS ALIGN

- Whichever way we look at it, we come in at around R8,3bn.
- OUTA realises that SANRAL will seek more flaws and errors to denounce our findings, analysis and claims.
- Which is why we now seek the actual and full information – in electronic format .
- Without excuses of secrecy due to privileged information etc.

MORE ANOMOLIES: WORK PACKAGE "I"

OUTA's ASSESSMENT OF WORK PACKAGE "I"

SCHEDULE (Gillooly's to Rietfontein IC)	Package I
SANRAL's Cost of Work Package I (before CPA & VAT)	1,102,283,849
Estimate Structure Costs by OUTA (Maximum)	150,000,000
OUTA's Est of SANRAL's Cost of Road works: (excluding Structures, CPA, VAT)	952,283,849
Length of Package:	10
Roadwork cost per KM (Excluding VAT & CPA):	95,228,385
OUTA's Estimate of Road Work per KM: (Adjusted for higher cost of Ultra Thin Continuously Concrete Technology applied)	32,500,000
Overpricing of Work Package I per KM:	62,728,385
% Variance:	193%

WORK PACKAGE I

- A simple route: Gillooly's to Rietfontein.
- 10 KM long with limited interchange work.
- Infrastructure work (Flyover and minimal bridge work) estimated at R150m.
- SANRAL paid **R1,4 bn** for this package.
- Excluding CPA and VAT, and less Structures estimate: SANRAL paid R952m.
- That is R95m / km for Road Work !!!!
- OUTA estimates 193% overpaid for road works

CONTRACT PRICE ADJUSTMENT (CPA)

Contract Price Adjustment on GFIP (limited packages)			
Work Package	SANRAL Paid	OUTA Calculations	% Variance
A	122,880,404	25,951,632	373%
B	239,656,005	51,220,972	368%
C	213,424,406	39,458,975	441%
D1	234,884,760	29,464,316	697%
D2			
E1	300,913,065	39,229,954	667%
E2			
G	69,410,000	29,598,222	135%
TOTAL	1,181,168,640	214,924,071	450%

Contract Price Adjustments (CPA) on GFIP

- CPA a standard adjustment, based on escalation indices provided by StatsSA monthly.
- Accounts for uncontrollable fluctuations (Fuel, Steel, Bitumen etc) are credited (or debited)
- Naturally, the higher the price of project, the higher the value of CPA.
- OUTA's GFIP costs, applied to the actual CPA indices = R215 m due to CPA (limited packages)
- SANRAL's high costs of GFIP and apparent inflated CPA = 450% higher.
- **OUTA estimates on total Package, SANRAL may have overcompensated contractors by over R1bn.**

BENCHMARKING IN AFRICA



ETHIOPIA: ADDIS ABABA to ADAMA Expressway

- Completed 2014.
- Greenfields project – **6 new lanes** (3 each way).
- 84 KM plus 18km link roads, 7,2 km front roads.
- Area: 2,625,700 m²
- Rand Value: R4,1 billion (2008).
- Cost / km: R47,4 m
- Cost / m²: R1,541
- COMPARED TO GFIP: R2,486 / m²

BENCHMARKING IN USA

Katy Freeway – Houston, Texas



Katy Freeway at Fry Road before



Katy Freeway at Fry Road after

KATY Freeway – Houston Texas

- Completed 2006, Widening - 22 lanes
- Bridge structures upgraded, rail line relocated
- Cost / m²: R1,359. GFIP: R2,486

BENCHMARK EXERCISE TO COMPARE GFIP ON COST / KM or m2 BASIS

Benchmark Ref # 7: Project Name: Addis Ababa–Adama Expressway

Year	KM	m ²	Value (\$) (2014)	Value (\$) (2008)	Value (ZAR)**	Cost ZAR/km	Cost ZAR/m ²
2014	84.7	2,625,700	700,000,000	493,472,378	4,046,473,500	47,774,185	1,541

Benchmark Ref #8: Project Name: Nairobi-Thika Superhighway Upgrade

Year	KM	m ²	Value (\$) (2012)	Value (\$) (2008)	Value (ZAR)**	Cost ZAR/km	Cost ZAR/m ²
2012	50	1,700,000	360,000,000	285,153,719	2,338,260,496	46,765,210	1,375

Benchmark Ref # 9: Project Name: Tonota to Francistown

Year	KM	m ²	Value (\$) (2014)	Value (\$) (2008)	Value (ZAR)**	Cost ZAR/km	Cost ZAR/m ²
2015	30	744,000	113,000,000	89,506,584	733,953,989	24,465,133	986

Benchmark Ref # 11: Project: The Katy Freeway (IH-10)

Year	KM	m ²	Value (\$) (2006)	Value (\$) (2008)	Value (ZAR)**	Cost ZAR/km	Cost ZAR/m ²
2006	11.1	1,409,700	208,000,000	233,708,800	1,916,412,160	172,649,744	1,359

Benchmark Ref #12: Western Europe - Western China International Transit Corridor (CAREC - 1b)

Year	KM	m ²	Value (\$) (2006)	Value (\$) (2008)	Value (ZAR)**	Cost ZAR/km	Cost ZAR/m ²
2012	305	8,387,500	1,256,000,000	994,869,641	8,157,931,056	26,747,315	973

Benchmark Ref #13: PATHE - Section Maliakos - Kleidi Motorway PPP, Greece

Year	KM	m ²	Value (€) (2012)	Value (€) (2008)	Value (ZAR)**	Cost ZAR/km	Cost ZAR/m ²
2012	230	8,387,500	1,256,000,000	994,869,641	11,938,435,692	51,906,242	

SANRAL's PRICE PAID FOR GFIP

Year	KM	m ²	Value (ZAR)**	Cost ZAR/km	Cost ZAR/m ²
2008	193	7,192,750	17,880,000,000	92,642,487	2,486

** Deflated to 2008 Prices and R : \$ Exchange rate at the time

BENCHMARKING

- Always best to compare by M² – if one can get the figure.
- Fine to do by KM if similar in width
- Try to compare similar type projects, eg. upgrade, widening etc.
- Convert to KM, Rands and Inflation.
- OUTA Research: Generally, other projects were more complex, had more new road works.
- We maintain that benchmarking with International projects (built to COLTO, FIDIC and World Bank standards) is an acceptable method of comparison.
- **How else does one tell if local markets are being manipulated?**

TOO MANY QUESTIONS

- SANRAL are the experts in this game – how did they allow such high pricing to prevail?
- Why did SANRAL not act faster to claw back the overcharges?
- Why is construction industry being “protected”?
- Why did CIDB halt its in-depth investigations into the matter?
- Why have SAFCEC and SAICE not taken SANRAL and the industry to task?

CONCLUSIONS

- The GFIP Price-tag of R17,9 bn **is excessively overpriced.**
- OUTA estimates value of between R8bn and R9bn (Less than ½).
- SANRAL has not been transparent and forthcoming with details and full explanations of how it arrived at R17,9bn.
- Information is missing on internet, when compared to other info.
- Even if OUTA has missed the mark by as much as 20%, the price-tag remains excessive.
- This issue will not abate until transparency and a full independent enquiry is commissioned.

RECOMMENDATIONS

- OUTA will send letters to relevant Ministers for request to intervene.
- OUTA will request that if SANRAL management is implicated or did not act in the best interests of the public:
 - E-Tolls is scrapped forthwith.
 - Corrective action is taken against ALL transgressors.
- The recent agreement between Government and Construction Industry players be revisited - as “punishment” imposed is hardly punitive.
- Civil claims are re-opened against construction industry for collusion and adequate penalties are applied.

...RECOMMENDATIONS

- That oversight & industry bodies explain why they have been silent on this issue.
- That the N3 Cedara – Durban project (and others) tenders are fully investigated: R15bn for a 78km upgrade project.
- That a Transport Regulator is introduced to monitor industry matters (An agreement was reached with The Road Freight Association that this would happen in 2012).
- That in conjunction with the introduction of a Transport Regulator, Government appoints an oversight body (that includes input from Civil Society) to monitor road construction pricing and tenders with the state.

THANK YOU

- Questions ?