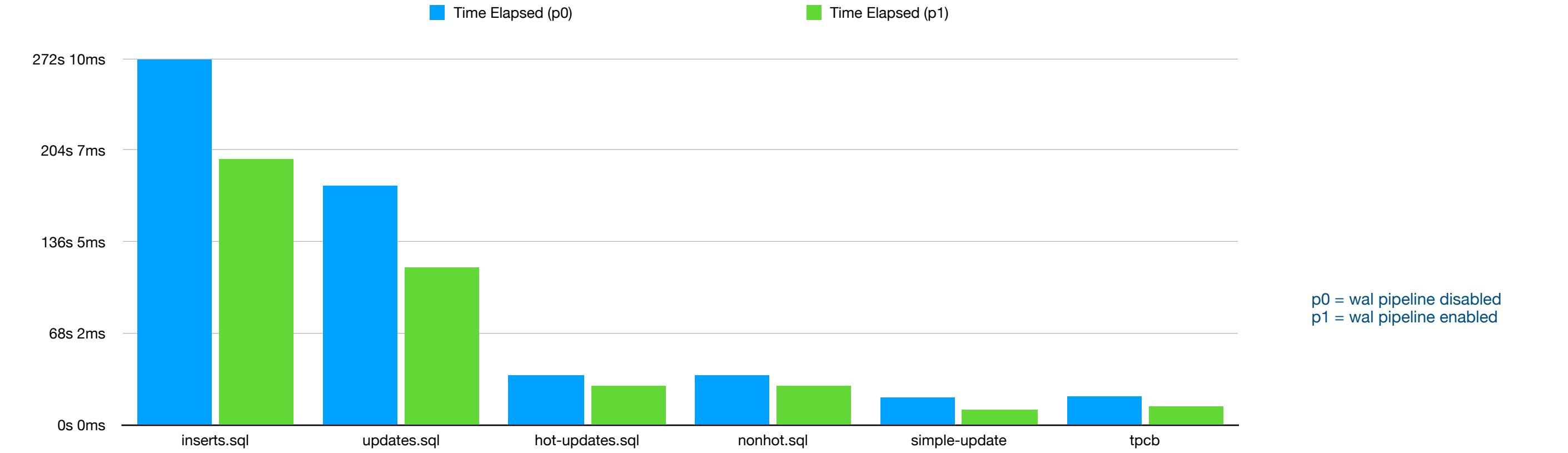




Recoveries (Default)							
	Time Elapsed (p0)	Time Elapsed (p1)	% perf	Workload	Base DB size	Cpu Profile (p0)	Cpu Profile (p1)
inserts.sql	272s 10ms	197s 570ms	27.37%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/inserts.sql	480 MB	rec-p0-inserts-def.svg	rec-p1-inserts-def.svg
updates.sql	177s 420ms	117s 80ms	34.01%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/updates.sql	480 MB	rec-p0-updates-def.svg	rec-p1-updates-def.svg
hot-updates.sql	36s 940ms	29s 240ms	20.84%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/hot-updates.sql	480 MB	rec-p0-hot-updates-def.svg	rec-p1-hot-updates-def-16.51.svg
nonhot.sql	36s 570ms	28s 980ms	20.75%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/nonhot.sql	480 MB	rec-p0-nonhot-def.svg	rec-p1-nonhot-def.svg
simple-update	20s 160ms	11s 580ms	42.56%	pgbench -n -c 20 -j 20 -T 300 -b simple-update	4913 MB	rec-p0-simple-update-def.svg	rec-p1-simple-update-def.svg
tpcb	20s 590ms	13s 640ms	33.75%	pgbench -n -c 20 -j 20 -T 300 -b tpcb-like postgres	4913 MB	rec-p0-tpcb-like-def.svg	rec-p1-tpcb-like-def.svg

Recoveries (shared_buffers=8GB)							
	Time Elapsed (p0)	Time Elapsed (p1)	% perf	Workload	Base DB size	Cpu Profile (p0)	Cpu Profile (p1)
inserts.sql	239s 330ms	176s 940ms	26.07%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/inserts.sql	480 MB	rec-p0-inserts-sbuff.svg	rec-p1-inserts-sbuff.svg
updates.sql	114s 60ms	74s 890ms	34.34%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/updates.sql	480 MB	rec-p0-updates-sbuff.svg	rec-p1-updates-sbuff.svg
hot-updates.sql	14s 200ms	9s 980ms	29.72%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/hot-updates.sql	480 MB	rec-p0-hot-updates-sbuff.svg	rec-p1-hot-updates-def-16.51.svg
nonhot.sql	13s 640ms	10s 130ms	25.73%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/nonhot.sql	480 MB	rec-p0-nonhot-sbuff.svg	rec-p1-nonhot-sbuff.svg
simple-update	14s 560ms	11s 40ms	24.18%	pgbench -n -c 20 -j 20 -T 300 -b simple-update	4913 MB	rec-p0-simple-update-sbuff.svg	rec-p1-simple-update-sbuff.svg
tpcb	14s 350ms	9s 570ms	33.31%	pgbench -n -c 20 -j 20 -T 300 -b tpcb-like postgres	4913 MB	rec-p0-tpcb-like-sbuff.svg	rec-p1-tpcb-like-sbuff.svg

Recoveries (shared_buffers=8GB, maintenance_work_mem=1GB, work_mem=1GB)							
	Time Elapsed (p0)	Time Elapsed (p1)	% perf	Workload	Base DB size	Cpu Profile (p0)	Cpu Profile (p1)
inserts.sql	240s 400ms	182s 10ms	24.29%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/inserts.sql	480 MB	rec-p0-inserts-sbuff-m.svg	rec-p1-inserts-sbuff-m.svg
updates.sql	111s 870ms	74s 110ms	33.75%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/updates.sql	480 MB	rec-p0-updates-sbuff-m.svg	rec-p1-updates-sbuff-m.svg
hot-updates.sql	13s 400ms	10s 30ms	25.15%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/hot-updates.sql	480 MB	rec-p0-hot-updates-sbuff-m.svg	rec-p1-hot-updates-def-16.51.svg
nonhot.sql	13s 30ms	9s 830ms	24.56%	pgbench -n -c 20 -j 20 -T 600 -f sql/workloads/nonhot.sql	480 MB	rec-p0-nonhot-sbuff-m.svg	rec-p1-nonhot-sbuff-m.svg
simple-update	16s 450ms	10s 900ms	33.74%	pgbench -n -c 20 -j 20 -T 300 -b simple-update	4913 MB	rec-p0-simple-update-sbuff-m.svg	rec-p1-simple-update-sbuff-m.svg
tpcb	14s 950ms	9s 870ms	33.98%	pgbench -n -c 20 -j 20 -T 300 -b tpcb-like postgres	4913 MB	rec-p0-tpcb-like-sbuff-m.svg	rec-p1-tpcb-like-sbuff-m.svg

Machine Specs:

CPU: Common KVM (4) @ 2.593GHz

GPU: 00:02.0 Vendor 1234 Device 1111

Memory: 15803MiB

custom workload files

inserts.sql	updates.sql	nonhot.sql	hot-updates.sql
INSERT INTO waltest (data) SELECT md5(random())::text FROM generate_series(1,100);	<pre>\set id random(1, 5000000) BEGIN; -- Update ~100 rows near the chosen ID UPDATE waltest SET data = md5(random())::text, updated_at = now() WHERE id BETWEEN :id AND :id + 100; -- Occasionally insert a new row \if random(1,100) < 5 INSERT INTO waltest (data) VALUES (md5(random())::text); \endif -- Occasionally delete a random</pre>	<pre>\set id random(1, 5000000) BEGIN; -- Update the indexed column (PRIMARY KEY) UPDATE waltest SET id = id WHERE id BETWEEN :id AND :id + 50; COMMIT;</pre>	<pre>BEGIN; UPDATE waltest SET data = md5(random())::text, -- same fixed size -> always HOT updated_at = clock_timestamp() -- small fixed-size column WHERE id = :id; COMMIT;</pre>

DB init for base backup

	Time Elapsed (off)
pgbench workload	pgbench -i -s 300 -F 90 postgres
custom workloads	<pre>CREATE TABLE waltest (id SERIAL PRIMARY KEY, data TEXT, updated_at TIMESTAMPTZ DEFAULT now()); INSERT INTO waltest (data) SELECT md5(i::text) FROM generate_series(1, 5000000) i;</pre>