

MAXIMIZING THE CAPACITY OF THE CONSTRAINT

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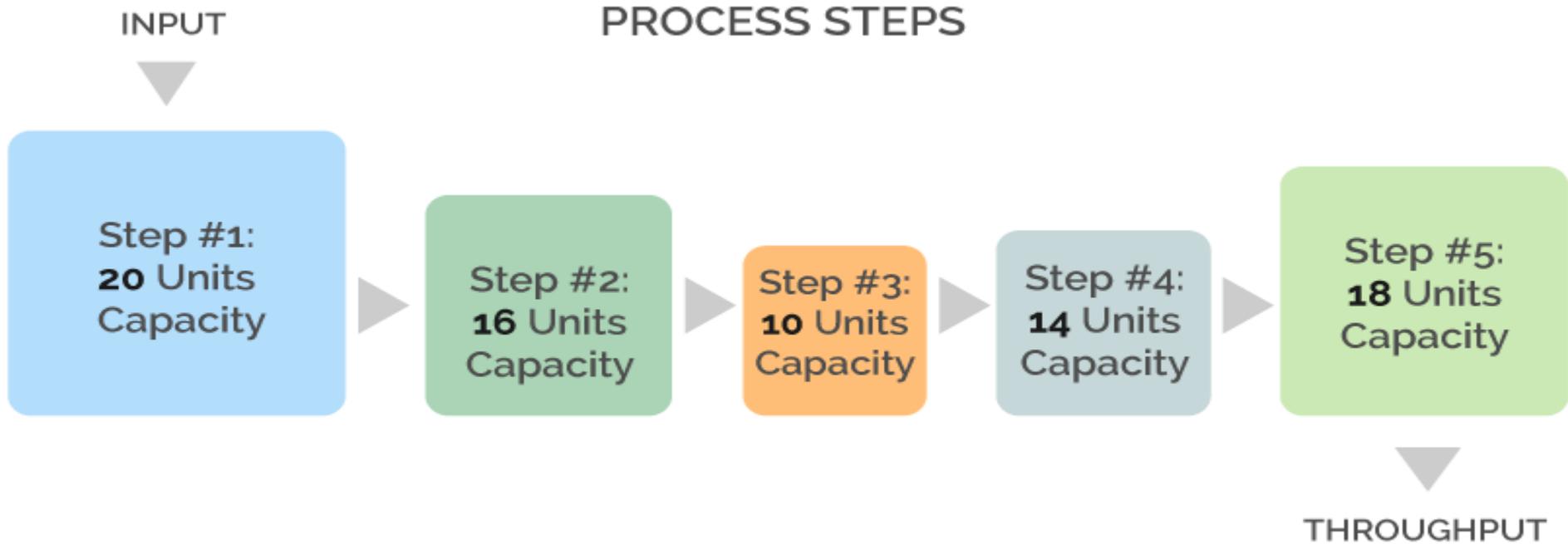
September 7-8, 2017



PRESENT: BUILDING ON SUCCESS 2017

**BREAKTHROUGH RESULTS
FOR
GOVERNMENT AND BUSINESS**

What Is A Constraint?



What Is A Constraint?

A constraint is anything that limits a system from achieving more of its goal—it causes bottlenecks and interrupts the flow of work.

A constraint is like the weak link on a chain. No matter how strong the chain is, if you pull on both ends hard enough it will always break at the weakest link. If you want to make the chain stronger, you must focus on the weak link.



What Is A Constraint?

From a management perspective, constraints have a very positive (rather than a negative) connotation. They are the key indicator of where to focus improvement efforts and are the leverage point for seeing the biggest results with the fewest changes possible.

Increasing the capacity of the constraint will improve the overall flow of work and increase the performance of the entire system.



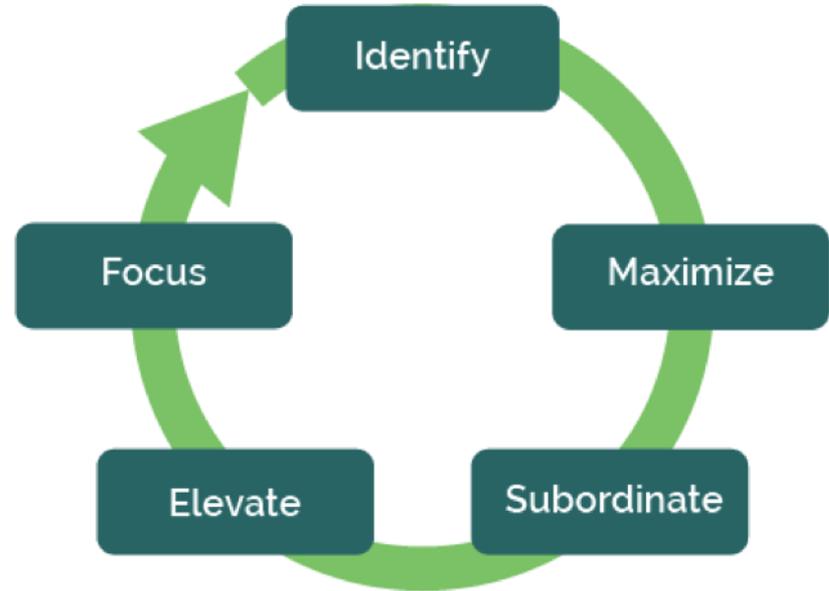
Constraints Are Everywhere



Five Focusing Steps-Maximize Capacity

Five Focusing Steps:

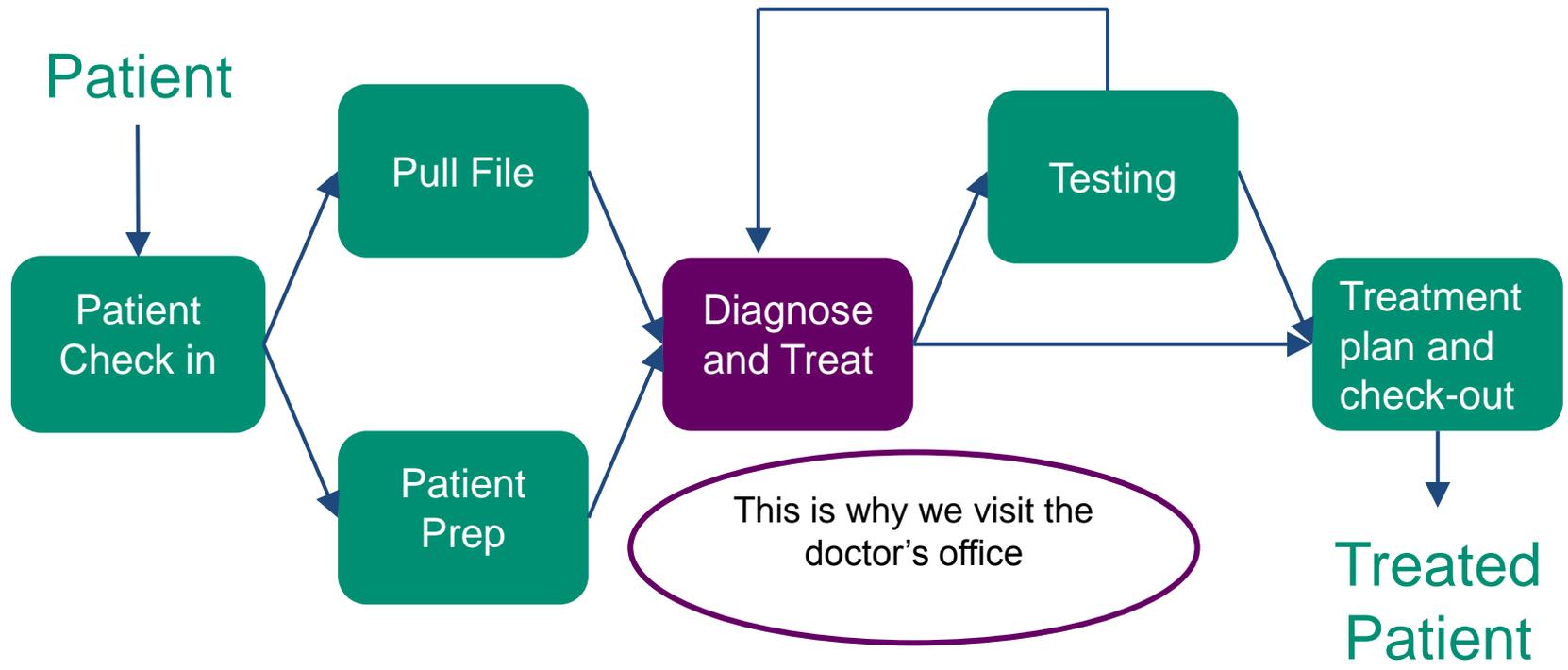
1. Identify the constraint
2. Maximize the constraint
3. Subordinate all other functions to the constraint
4. Elevate the constraint
1. Focus (don't let inertia take over)



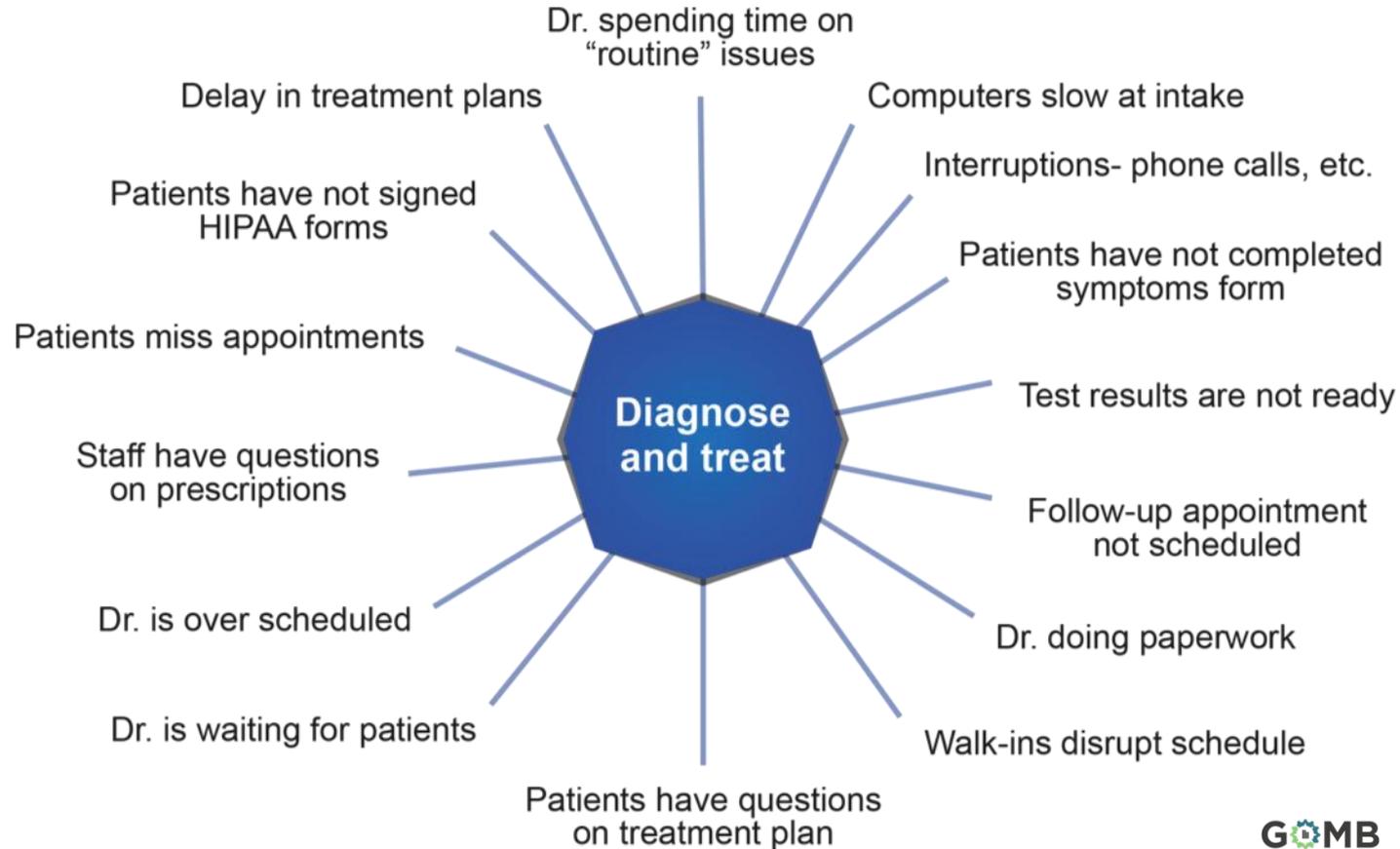
Blue Light Story



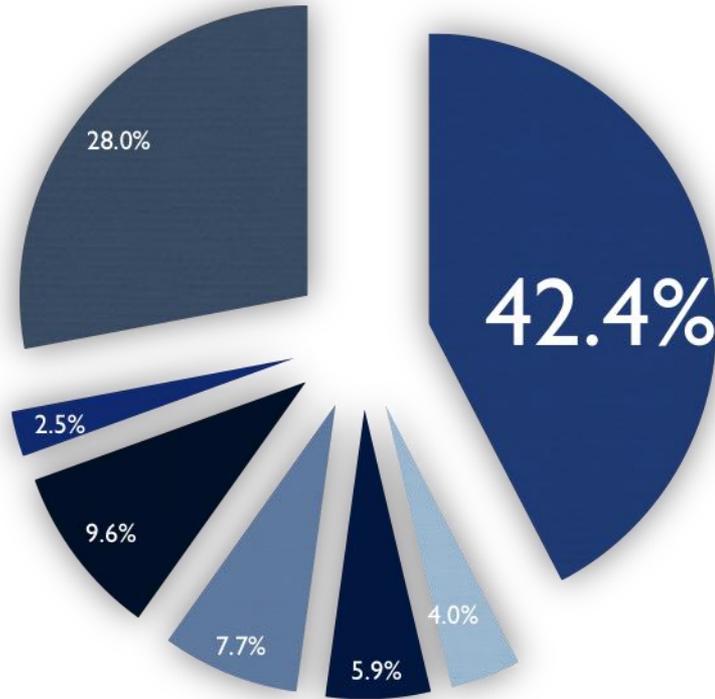
Doctor's Office Example



Interference Diagram



Gap Analysis



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Rod McDaniels, Statewide Program Manager
Utah Department of Transportation



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**BREAKTHROUGH RESULTS
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Statewide Access Management Program



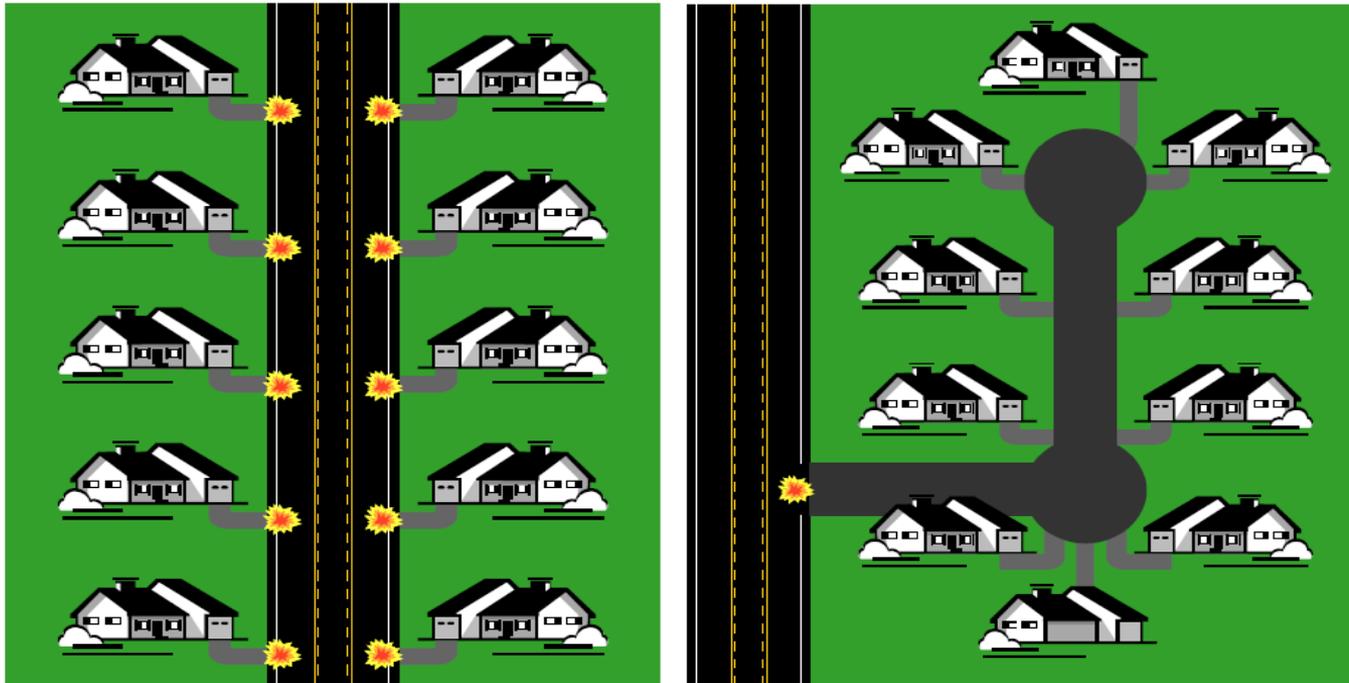
Access management is the coordinated planning, regulation, and design of access between roadways and adjacent land development.

Benefits of Reducing Conflict Points



Less Can = More

Exhibit 14: Access management reduces the number of conflicts on local roads.

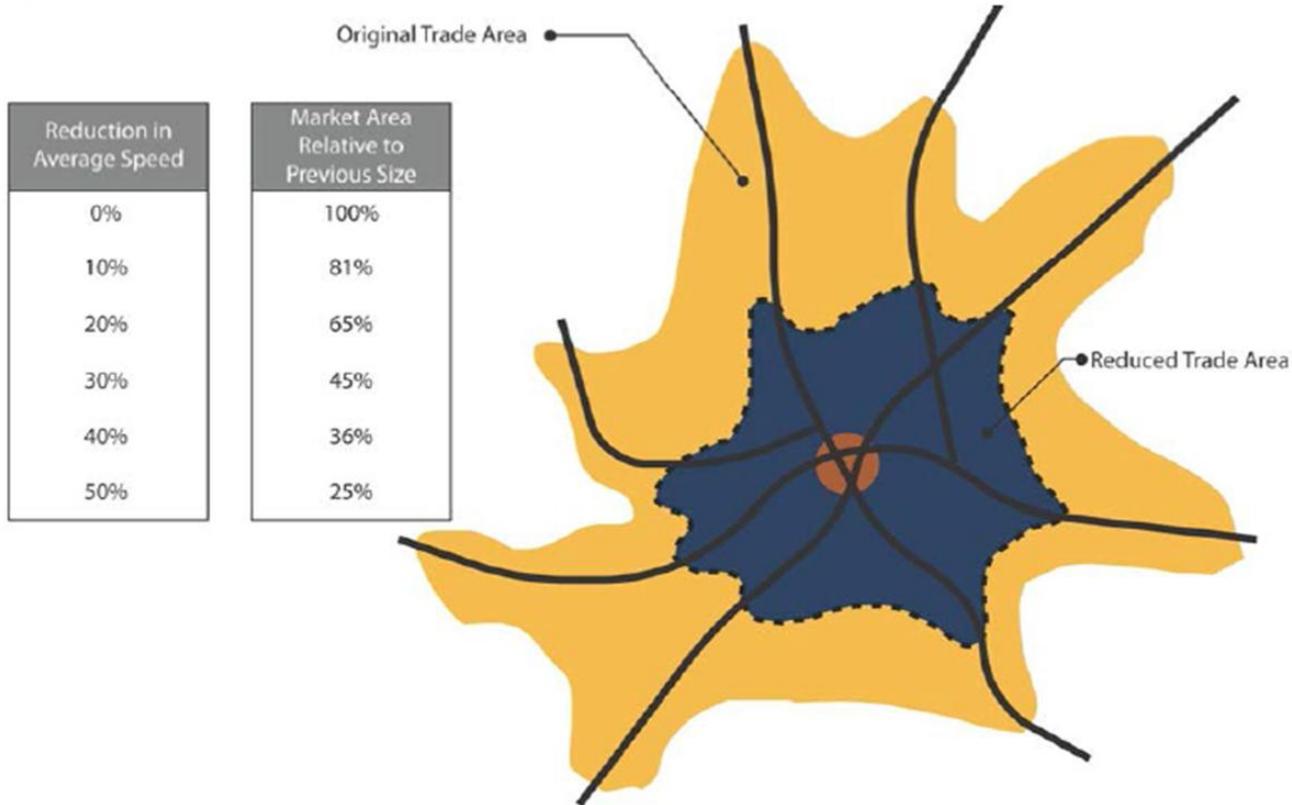


Large Number of Conflicts

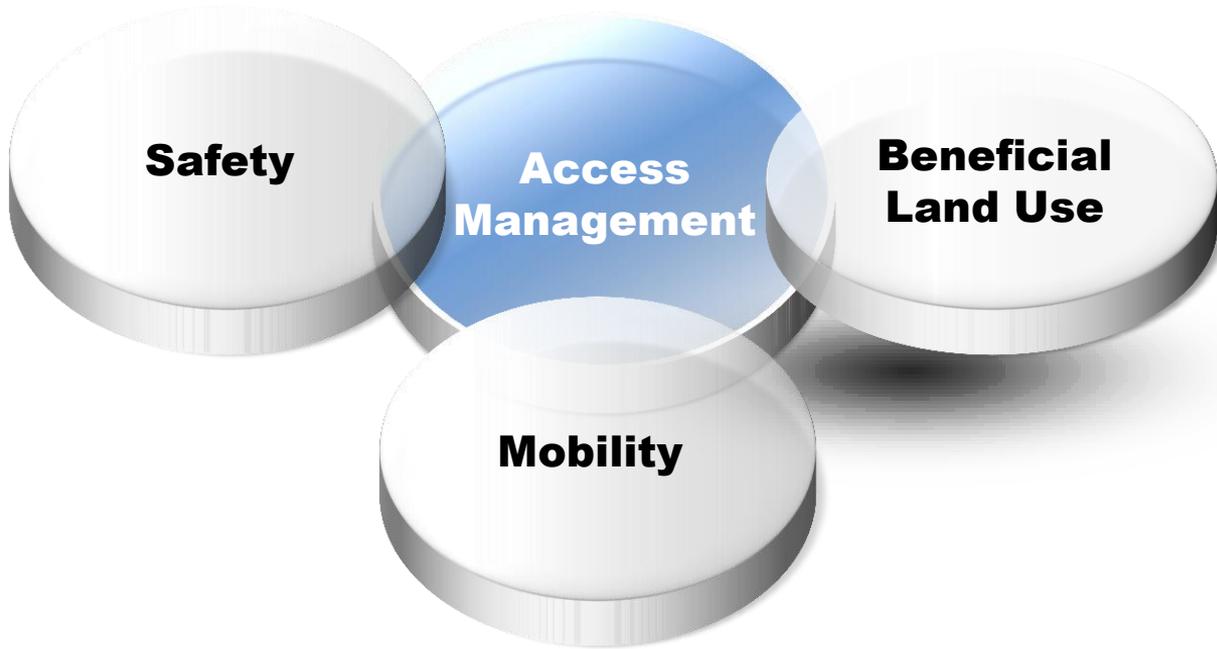
Conflicts Reduced

Travel Speed & Market Trade Area

Figure 2-8. Affect of travel speed reduction on market area



The Tricky Balancing Act



QUICK FACTS

4.5 Million = Minimum projected State of Utah Population by 2040.

16,000 = Current number of lane miles maintained by UDOT.

Travel demand will grow in proportion to state population.

Our SUCCESS Story begins with...

GOVERNOR'S CHALLENGE

"I am challenging my cabinet, and all state employees, through improving quality and reducing costs, to improve their operational efficiency by 25% over the next four years"

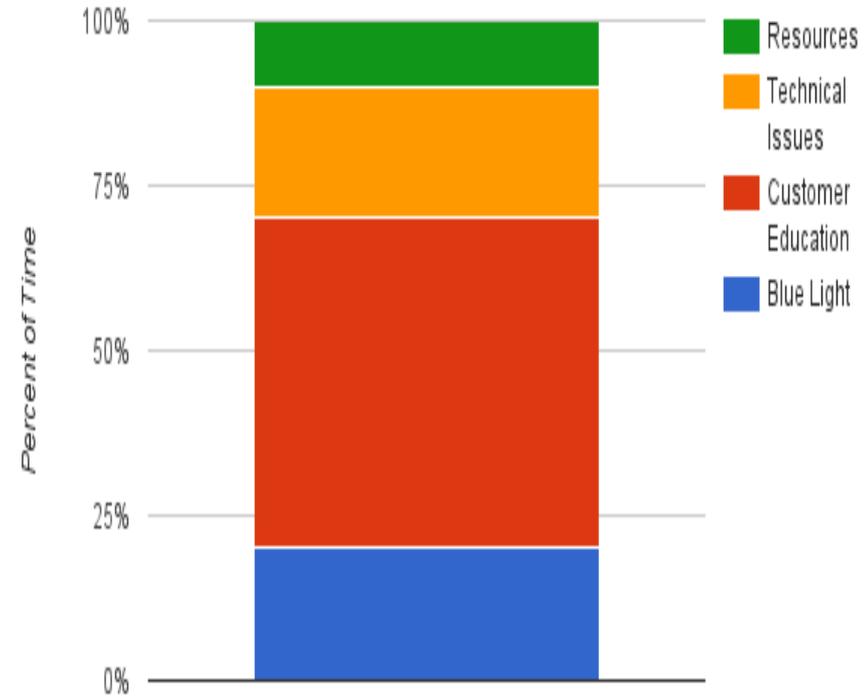
-Governor Gary Herbert
2013 State of the State address



Where We Started...

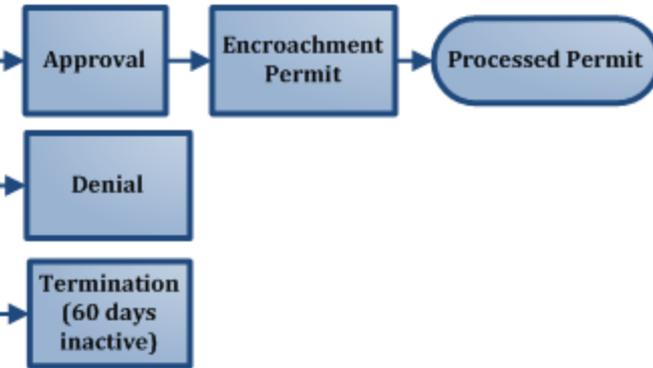
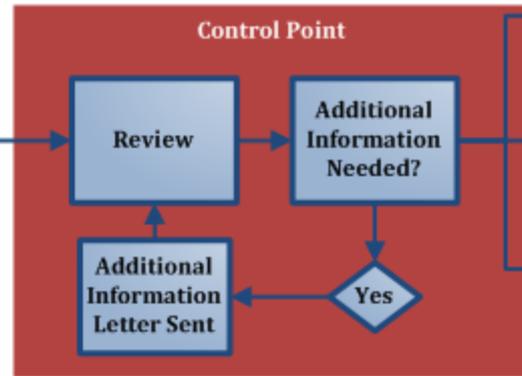
Interference & Blue Light Analysis

<u>Category</u>	<u>Interference</u>
Resource Inputs	<ul style="list-style-type: none">•Lack of access to technical experts•Lack of software programming resources
Technical Issues	<ul style="list-style-type: none">•Lack of consistent business processes•Convolutd workflow•Online Permit System interface mismatch•Inconsistent performance metrics
Customer Education	<ul style="list-style-type: none">•Poor instructions•No statewide application checklist•No pre-app meeting notes to customer•Seriously deficient web content•Inconsistent applicant experience•Reviewers gathering info (not reviewing)



Identifying the Workflow Constraints

ENDLESS
LOOP



Tactics & Strategy (subordinating to constraint)

Core process development for key review functions

ACCESS MANAGEMENT PROGRAM
Variance Request Form

Access-related variances are governed by Utah Administrative Code R330-6-9. A variance may be considered for any design standard of this title that is not applicable or feasible given the proposed physical and operational characteristics of the site. Applicants seeking a variance for these design standards must submit a thoroughly detailed variance request using this form along with a completed Grant of Access application.

The applicant must clearly demonstrate the variance request meets minimum acceptable engineering, operation, and safety standards. The applicant must also clearly demonstrate the variance is not detrimental to the health, welfare, and safety of the public. A variance from spacing standards will not be considered unless the proposed access cannot meet the minimum spacing standards and no other reasonable alternate access can be afforded to the site.

INSTRUCTIONS: Complete all fields below and submit with a completed Grant of Access application. Additional sheets may be attached, however a summary of one complete sheet to be included in the access provided below. Simply stating "see sheet #"

PROPERTY OWNER INFORMATION		APPLICANT INFORMATION	
Name		Name	
Mailing Address		Mailing Address	
City, State, Zip		City, State, Zip	
Email		Email	
Phone		Phone	

PROPOSED ACCESS INFORMATION	
Parcel Address	Parcel Number
State Route ID	Allegiant Station
Latitude (decimal degree)	Longitude (decimal degree)
Access Width	Access Use Select One

PRE-APPLICATION COORDINATION MEETING INFORMATION

Has a pre-application coordination meeting been held with the appropriate Regulator?

Yes Meeting Date: _____ No

VARIANCE REQUEST OVERVIEW

Describe why this variance is being requested:

VARIANCE JUSTIFICATION (I)

Describe how the applicant has considered all other feasible alternatives to provide reasonable alternative access to the property or development and demonstrate that better alternatives in terms of highway operations are not feasible or do not exist:

©2018 Grant of Access Application Variance Request Form Page 1 of 1

Formalized Variance

CONDITIONAL ACCESS PERMIT

GENERAL INFORMATION					
Project Name	Agency	Location	USAP Application ID		
ADDRESS	MAILING ADDRESS	Location - City/State	Location - County	Access Use Type	Construction
43511 State Address	43511 State Address	Parcel Type	Access Use Type	Construction	Construction
Property Owner Name	Access Use	Access Use	Access Use	Access Use	Access Use
OWNER, I.E.	OWNER, I.E.	OWNER, I.E.	OWNER, I.E.	OWNER, I.E.	OWNER, I.E.

LOCATION, WIDTHS AND ACCESS CATEGORY INFORMATION

State Route	Allegiant Station	Access Category	Access Width	Access Category
1600	1600	1600	1600	1600

A Conditional Access Permit is hereby authorized subject to the Utah Department of Transportation's (the Department's) Access Management Rules (Utah Administrative Code R330-6-9), the Utility Accommodation Rules (Utah Administrative Code R330-7), the Standard Specifications for Road and Bridge Construction, and any rules, conditions, and limitations set forth herein. The Utah Administrative Code R330-6-9(e)(g), a Conditional Access Permit shall expire if the access construction is not completed within twelve (12) months of the issuance date as identified at the top left of this document.

By carrying out the activities authorized by this approval the permittee and the permittee's successors in interests and its assigns agree to accept all terms, conditions, and limitations, of the approval including any attachments submitted with the Conditional Access Permit Application. In addition, the permittee certifies they will comply with all applicable regulations, property control and laws of the public and will work to prevent accidents and shall defend, indemnify, and hold harmless the Department from all damages arising out of any and all operations performed during construction and operation of said access. The Utah Administrative Code R330-6-9(f)(4), the permittee understands any potential misrepresentation of existing or future conditions or of information required for the application for the purpose of receiving a more favorable determination is sufficient grounds for permit revocation. The access allowed under this permit, creates a license to only access a state highway to the extent provided in the permit. The access may be closed, modified or relocated by UDOT if, at any time, UDOT determines in its sole discretion that safety, efficiency or other reasons so require.

This conditional access permit does NOT allow construction or other activities within a state right-of-way. An encroachment permit must be separately applied for and issued before any construction within a state right-of-way may commence. Work on UDOT's right-of-way is seasonally restricted from October 15 to April 15. Work is allowed on the right-of-way during the AADT peak traffic hours of 6:00 A.M. to 9:00 A.M. and 3:30 P.M. to 6:00 P.M. Some exceptions to this A.M.P.M. peak travel restriction may be permissible for low AADT routes in rural areas. Any such exception requires special State approval and must be explicitly stated on the approved encroachment permit.

Authorizing Name (printed): _____ Authorizing Name (signed): _____

TERMS, CONDITIONS, AND LIMITATIONS

- The access permit holder shall provide a performance bond to the Department in the amount of \$100,000. The access permit shall be void if not accompanied by this performance bond. The access permit shall be void if not accompanied by this performance bond. The access permit shall be void if not accompanied by this performance bond.
- The permit holder agrees to maintain the permitted access in a professional workmanship manner. Any physical defects including but not limited to potholes or other surface conditions shall be repaired by the permit holder. The permit holder shall be responsible for any damage to the roadway or other infrastructure that occurs as a result of the access. The permit holder shall be responsible for any damage to the roadway or other infrastructure that occurs as a result of the access.
- Before commencing work on the State highway, the contractor who is awarded the project must have a performance bond on file with UDOT and obtain an encroachment permit from the UDOT/OTI Permit Office.

UDOT Conditional Access Permit - Rev. March, 2018 Page 1 of 1

Redesigned Permit

PRE-APPLICATION MEETING DATE

UDOT PERMIT POINT OF CONTACT

MEETING PARTICIPANT LIST

Name (please print)	Representing	Email	Phone
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

ACCESS APPLICATION AND TRAFFIC IMPACT STUDY REVIEW LEVEL

Your Review Fee is:

Level	Non-Refundable Application Review Fee
I	\$75.00
II	\$475.00
III	\$1,000.00
IV	\$2,300.00

*Work with local UDOT Region personnel to determine payment method.

DOCUMENTS REQUIRED TO SUBMIT FORMAL APPLICATION

Document Type	Additional Information
1 Detailed Site Plan	11" x 17" (24" x 36" acceptable)
2 Traffic Impact Study	Level
3 Variance Request Form	www.udot.utah.gov/files/VarianceRequestForm
4 Future Shared Access Easement/Agreement	
5 Crisis Statement	
6 Non-Refundable Application Review Fee	
7 Other	
8 Other	
9 Other	
10 Other	
11 Other	

Once all required documents have been compiled, checked for quality and completeness, and are ready for formal application review the applicant can apply online by going to this web address: www.udot.utah.gov/infrastructure. Please ensure all documents have been converted into an electronic file format and are ready to be uploaded (PDF format preferred). For Additional Conditional Access Permit-related information please navigate to www.udot.utah.gov/AccessManagement.

©2018 UDOT Conditional Access Permit Application Form Page 1 of 1

Application Checklist

Tactics & Strategy (subordinating to constraint)

Online Permits System Update

The original interface is a simple web browser window with a header for 'Utah.gov Services Agencies' and 'Online Permit System'. It features a 'Customer Application List' section with a table of recent applications. The table has columns for 'App ID', 'Type', 'Cust W.O.', 'Location', 'Begin Date', 'Status', 'Status Date', and 'Approvals'. Below the table are buttons for 'Edit Customer Information' and 'New Permit Application'. At the bottom, there is a footer with links to 'Utah.gov Home', 'Utah.gov Terms of Use', 'Utah.gov Privacy Policy', 'Utah.gov Accessibility Policy', and 'Translate Utah.gov', along with a copyright notice for 2015 State of Utah.

App ID	Type	Cust W.O.	Location	Begin Date	Status	Status Date	Approvals
51121	Encroachment	1234	6122 Strader Street	11/2/2012	Application Terminated by Customer	11/29/2012	[Doc] [Fax] [E-mail]
51130	Encroachment	123456	6122 Strader Street	11/05/2012	Application Terminated by Customer	11/05/2012	[Doc] [Fax] [E-mail]
51118	Encroachment	EX-59765221	2018 South 2760 West	11/05/2012	Application Terminated by Customer	11/05/2012	[Doc] [Fax] [E-mail]

Original Online System

The redesigned interface is a modern web application with a clean, user-centric design. It features a prominent 'LIDOT' logo and a 'Welcome to the enhanced version of the Online Permit System' message. The interface is divided into several sections: 'Internal Telectronics' with contact information, 'Pending Applications (not yet submitted to UDOT)' with a table, 'Applications in Progress' with a table, and 'Finalized Applications and Permits' with a table. A navigation menu at the bottom includes icons for 'Conditional Access Permit', 'Encroachment', 'Manhole Access', 'Special Events', 'My Permits', and 'Motor Carriers'. The design uses a light blue and white color scheme with clear typography and intuitive navigation elements.

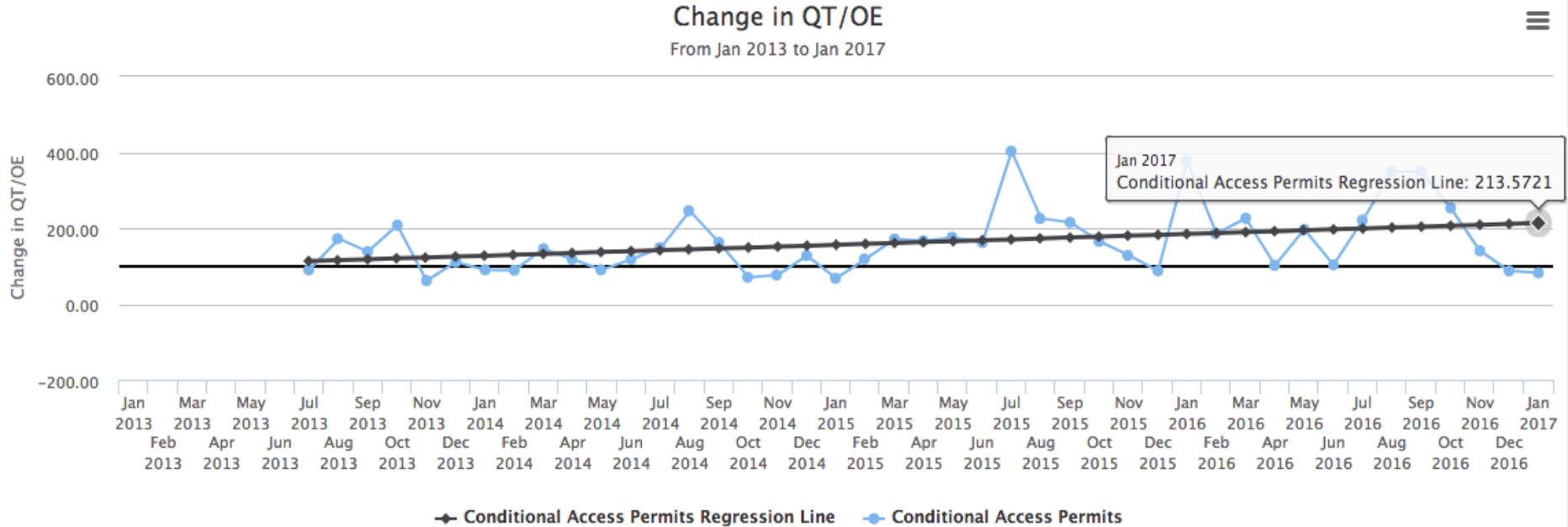
App ID No.	Permit Type	Cust W.O.	Permit Location	Begin Date	Current Permit Status
69135	Special Event	sdhdfud		05/31/2016	
69133	Access	4501		05/29/2016	
69128	Special Event	4901 s		05/31/2016	
69127	Special Event	4500 S 2700 W		05/30/2016	
69126	Special Event	4501 South 2700 West, Salt Lake City, UT.		06/15/2016	

App ID No.	Permit Type	Cust W.O.	Permit Location	Begin Date	Current Permit Status
69158	Access	asdfasdfasf		06/29/2016	Pay Pre-Review Fee
69157	Special Event	asdfasdfasdfasf		06/30/2016	Project Under Review
69153	Encroachment	DF SDF SAD		06/29/2016	Permit Pending
69151	Encroachment	asdfasf		06/29/2016	Permit Pending
69150	Special Event	start point		06/29/2016	Permit Pending

App ID No.	Permit Type	Cust W.O.	Permit Location	Begin Date	Current Permit Status
69156	Manhole Access	asdfasdfasf		06/29/2016	Permit Issued
69155	Encroachment	asdfasf djk		06/29/2016	Permit Issued
69154	Encroachment	add tes payment		06/29/2016	Permit Issued
69152	Encroachment	asdfasf		06/29/2016	Permit Issued

Redesigned Customer Interface

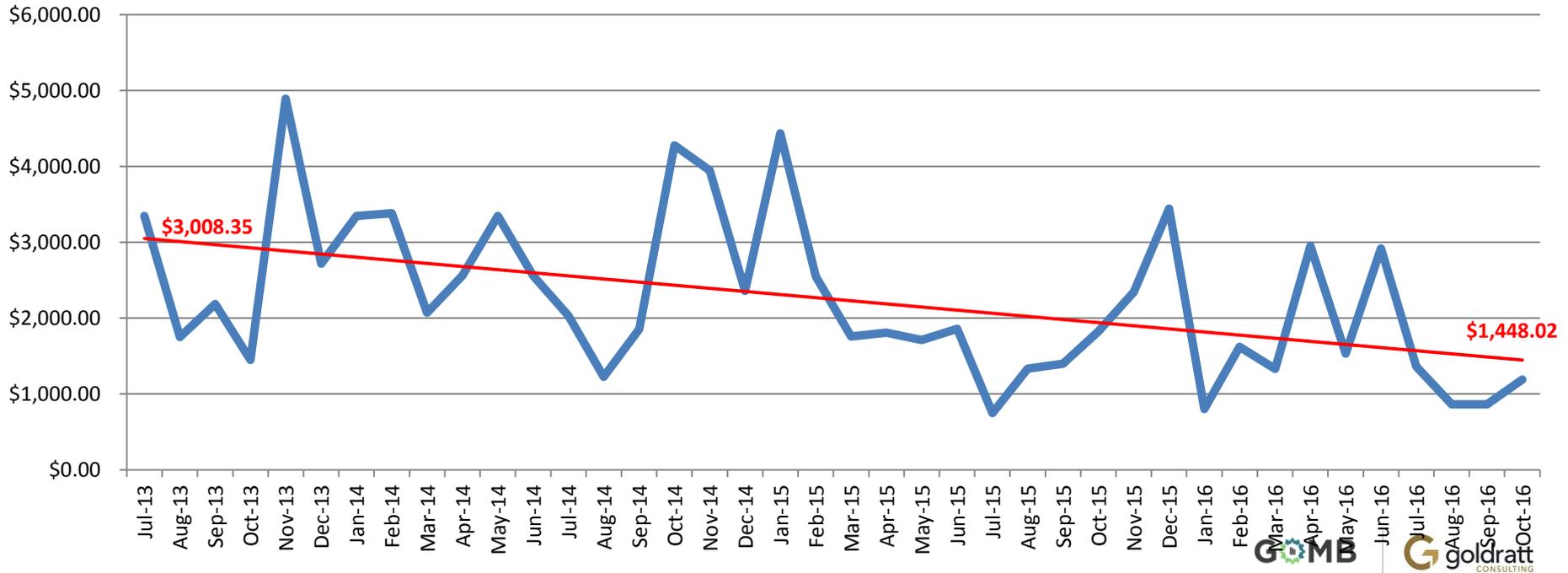
QUANTITATIVE RESULTS



Highcharts.com

QUANTITATIVE RESULTS

UDOT Conditional Access Permits Average Cost (OE) Per Timely Permit (QT) (Average savings are \$1,560 for each timely permit)



Essential SUCCESS Drivers!



- **Statewide Permitting Operations Team**
- **UDOT's Supportive Leadership & Innovative Culture**
- **GOMB's Professional Program Mentors**

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Travis K. Wegkamp, Director of Captive Insurance
Utah Department of Insurance



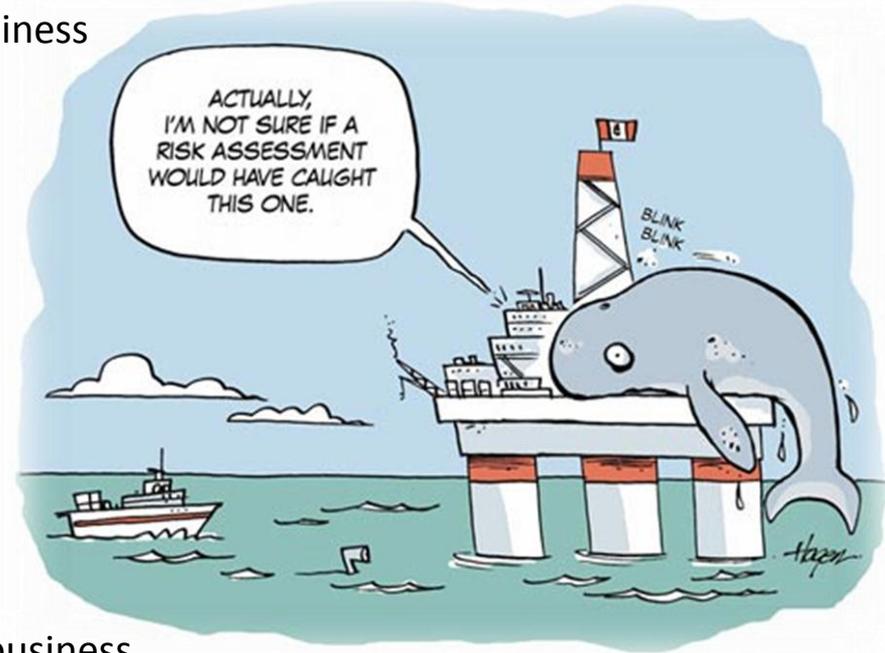
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**BREAKTHROUGH RESULTS
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GOVERNMENT AND BUSINESS**

Insurance as Risk Management

Risk Management, what is it?

- Recognition of potential risks and/or loss to business
- How can I protect against risk?
- How do I pay for loss?
 - Insurance
 - Loss mitigation
- Risk management is much more than insurance
 - Retain good employees
 - Protection of business assets – physical, intellectual, reputational
 - Loss of business – interruption, key supplier, key customer
 - What you may determine as a risk to your business



Risk Management Strategies

Traditional:

- Buy commercial insurance
 - Many limitations and exclusions
 - Every dollar goes to insurance company
 - Important coverages may not be available
- Set aside cash in a “Rainy Day Fund”
 - Subject to Creditors
 - Piggy-Bank Results
 - Funded with After Tax (non-deductible) Dollars



Alternative:

- “Captive Insurance” as an alternative risk management strategy
 - Insure those limitations and exclusions
 - Every premium dollar goes to your own insurance company
 - Important coverages can be insured
 - Solid Investment results
 - Potentially funded with Pre-Tax (deductible dollars)

What is Captive Insurance?

- A Captive Insurance Company is a *formal* way to do self insurance.
- The principal insureds of a Captive Insurance Company are its owners, and they control the business.
- A Captive Insurance Company may insure parent company and its affiliates or related-parties.

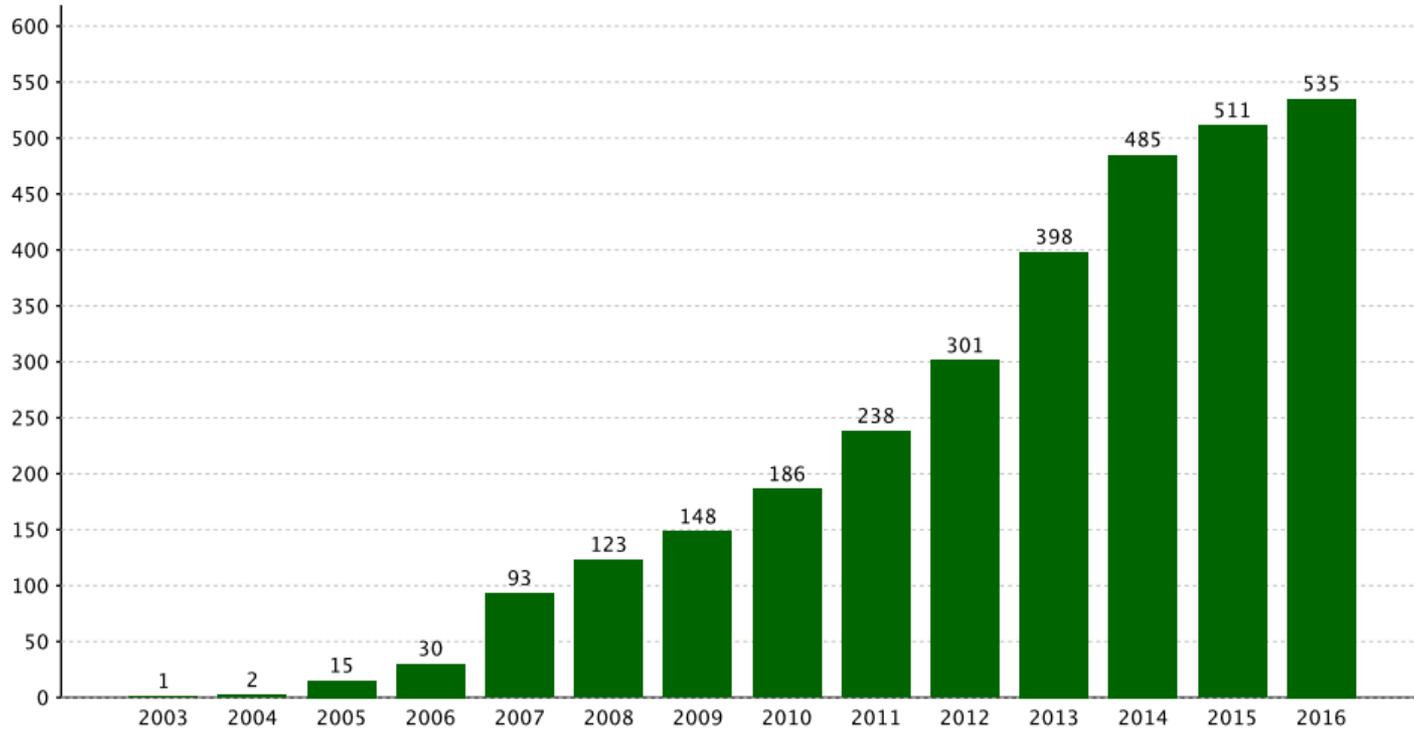
Why use a Captive?

- Customize coverages/policies to your needs.
- Incentive to maximize risk mitigation strategies (cost savings and positive results of underwriting translate to your gains)
- Control over investments
- Tax advantages (timing of claims expensing, premium deductibility, etc.)
- Access to reinsurance markets.



Utah Captive Insurance industry

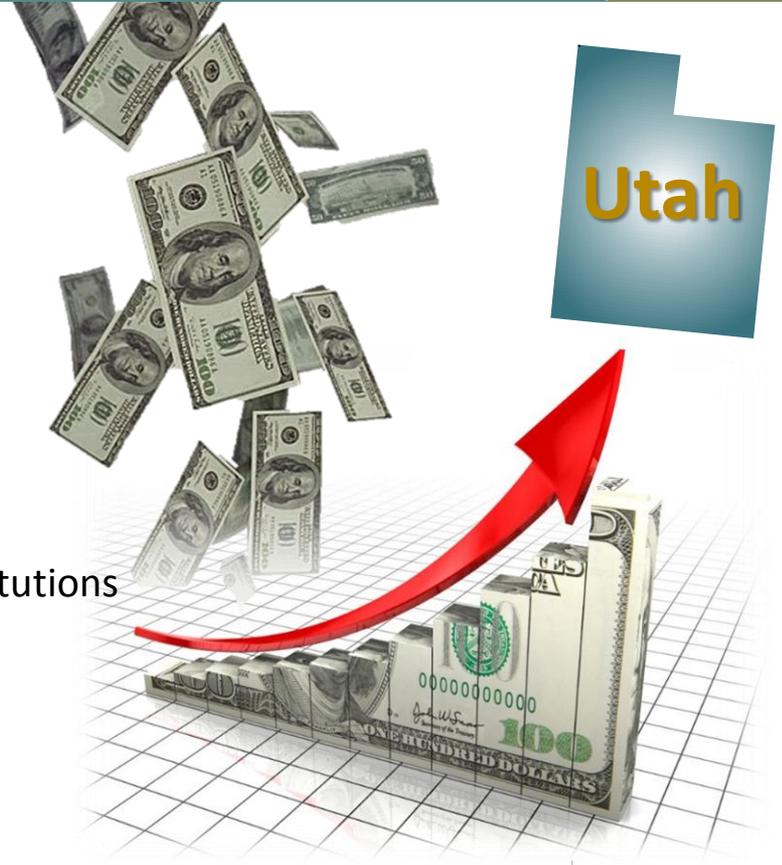
Historical growth of Utah domiciled Captive Insurance Companies



Utah Captive Industry

Captive industry economic benefit to the State

- Utah Related Payroll & Expenditures
\$13,953,066
- Annual Fees paid to Utah Insurance Dept.
\$2,150,770
- Total Cash & Invested Assets held in Utah Financial Institutions
\$796,329,837
- Hotel room nights in Utah
\$1,841



SUCCESS Analysis

- Three primary functions identified and combined for SUCCESS measures:
 1. Licensing
 2. Financial Analysis
 3. Examination
- Significant and continued year over year growth created a dilemma; how do we handle it?
- Projections based on number of captive insurance companies needing regulatory oversight estimated a workforce of around 30+ Analysts/Examiners needed to handle the workload predicted for the near future, and the growth issues currently faced.



SUCCESS Solutions

- Through SUCCESS discussions we identified our “blue light” as Analysts being able to dedicate their time to actual licensing, analysis and examination duties.
- Three key steps taken to maximize an Analyst’s “blue light”, and alleviate bottlenecks:
 1. Development and implementation of IT resources.
 2. Hiring of an Administrative Assistant.
 3. Creation of Assistant Director position.



MAXIMIZING THE CAPACITY
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QUESTIONS?



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