

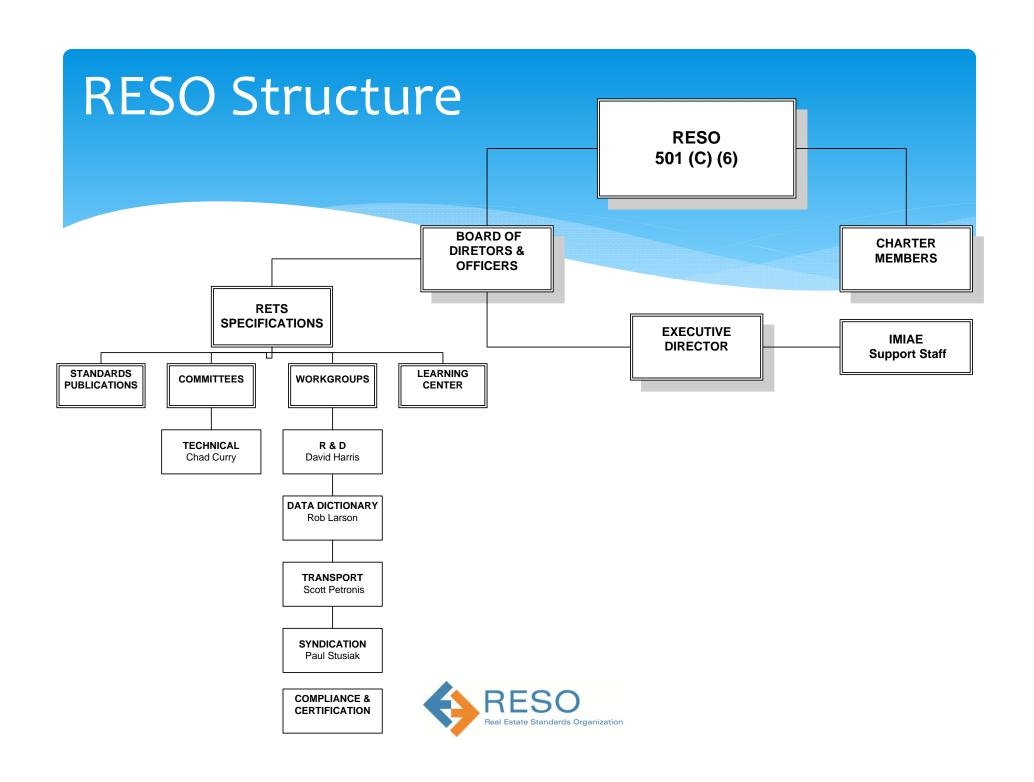
RESO

Real Estate Standards Organization

CHARTER MEMBER

National Association of Realtors
Annual Conference
Orlando, FL
Nov. 9, 2012





RESO Board of Directors 2013

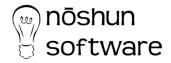
MARK LESSWING NAR	RICH LULL LPS MLS Solutions	STEVE BYRD Carolina MLS	DUANE FOUTS Home Smart
CHAD CURRY NAR	ROBERT OVERMAN Noshun Software	RUSS BERGERON MRED MLS	ROBERT TOOTHAKER CBRE
CHIP MCAVOY Corelogic	ART CARTER CRMLS	JEREMY CRAWFORD MLS Listings, Inc.	Open Seat
MARK WISE MOVE	JEFF YOUNG Realtors Property Resource	REBECCA JENSEN Utahrealestate.com	Open Seat

CHARTER MEMBERS

















Class A

The National Association of REALTORS® (NAR) is the exclusive Class A member. That membership entitles NAR to have:

- Two seats on the Board of Directors
- RESO Conference registration fees waived
- The right to approve the applicant pool for the Executive Director position

Class B

If you are a Vendor Company, Here is what RESO membership offers to you:

- The ability to gain a competitive edge
- · A voice in the standard-setting process
- The chance to steer the standard
- An opportunity to partner with your customers to find solutions

Any vendor, consultant, company or technology partner providing services to the real estate industry shall be eligible for Class B membership. Dues for Class B membership are based on the company's gross annual revenues:

REVENUE	DUES AMOUNT
\$25,000,000 and above	\$25,000
\$10,000,000-\$24,999,999	\$15,000
\$5,000,000-\$9,999,999	\$7,500
\$1,000,000-\$4,999,999	\$2,500
\$0-\$999,999	\$500

Class C

If you are an MLS or Association Executive, Here is what RESO membership offers to you:

- An opportunity to increase the value proposition to your customers (members and business partners)
- Support for software vendors to create innovative applications for your members
- Representation as an MLS in the decision-making process on the standards that will drive the future
- The chance to be part of the standards making process to insure accurate property listing data and syndication
- The ability to increase your expertise and participation at the highest levels

Any REALTOR® association or multiple listing service is eligible for Class C membership. Dues for Class C membership are based on the number of active subscribers in the MLS or active Realtors in the Association:

MEMBERS	DUES
50,000+	\$20,000
25,000-49,999	\$15,000
10,000-24,999	\$7,500
2,000-10,000	\$2,500
1-1,999	\$500

Class D

If you are a real estate Agent, Broker or Brokerage, Here is what RESO membership offers to you:

- The ability to join the standards community and be an insider
- The ability to demonstrate leadership by advocating data accuracy in property listings and syndication
- The chance to increase your expertise and participation at your MLS regarding data standards for property listings

Any real estate brokerage firm, real estate broker or real estate agent shall be eligible for Class D membership. Dues for Class D membership are based on the total number of licensees.

LICENSEES	DUES AMOUNT
50,000+	\$20,000
25,000-49,999	\$15,000
10,000-24,999	\$7,500
5,000-9,999	\$2,500
1-4,999	\$500

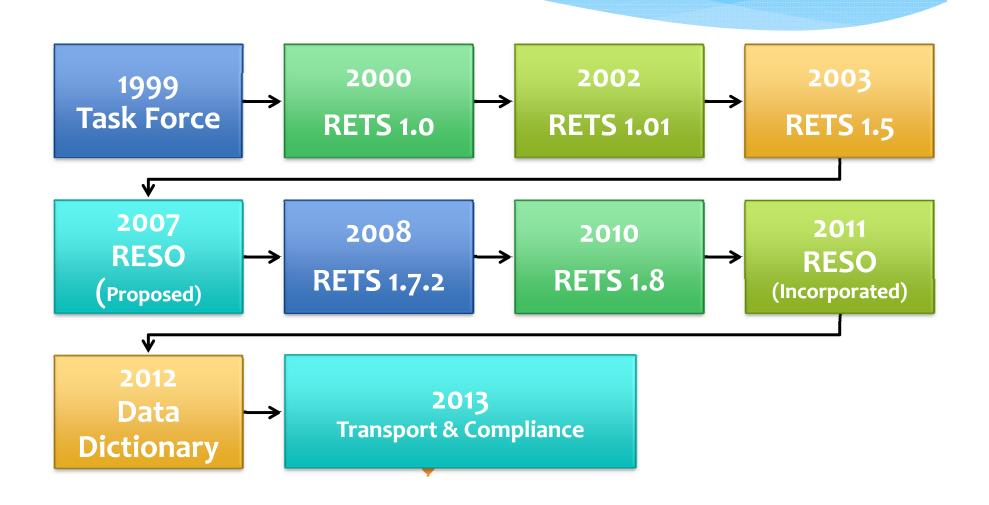


^{*} RESO renewals are handled on an anniversary calendar.

RESO MEMBERSHIP CLASSES

1999 to 2012

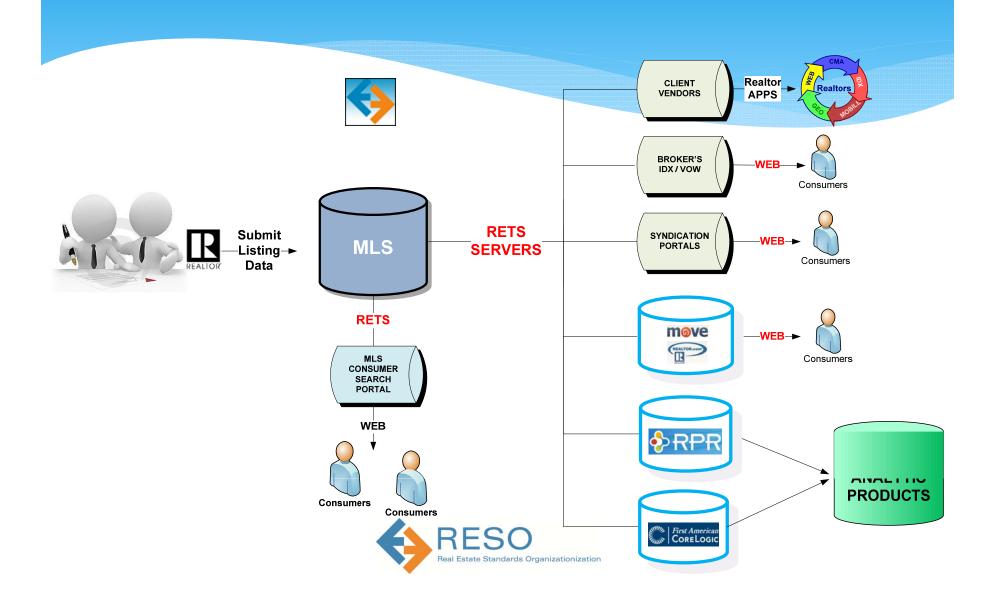
RETS workgroup began informal meetings to discuss data standards for MLS industry.



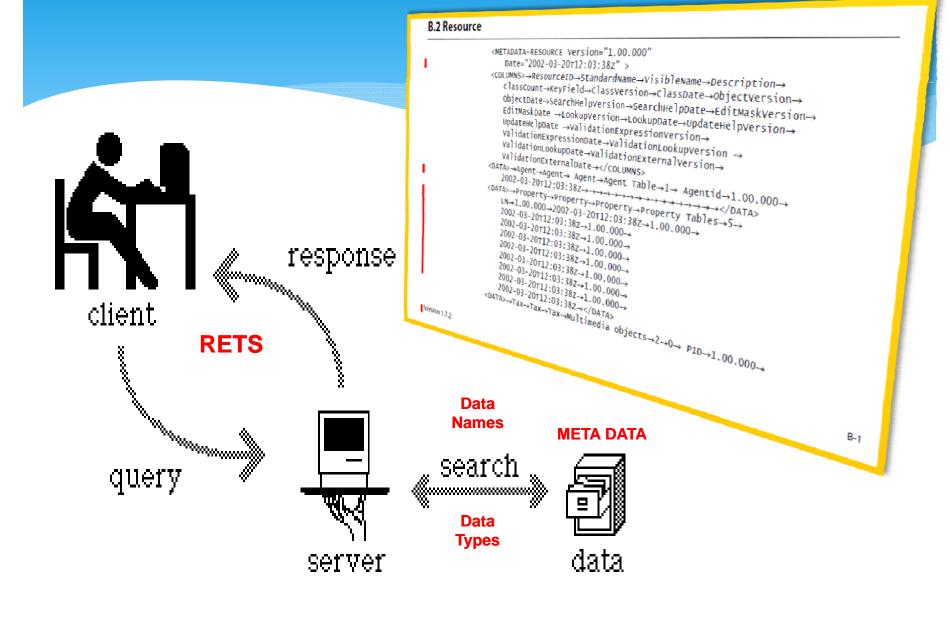
The Task Force: 1999

LARRY COLSON Moore Data Management	TONY SALVATI Grant Thornton
TOM CURTIS Metro MLS	ERROL SAMUELSON RealSelect, Inc.
KEVIN KNOEPP GTE Enterprises	ALAN SHAPIRO Interealty
TOM MCLEAN Resolutions Software Consulting	BRUCE TOBACK OPT, Inc.
DAN MUSSO WyldFyre Technologies	DALE STINTON NAR

RETS is a Data Transport Standard



RETS in Action



It All Begins With the Realtor's Listing...

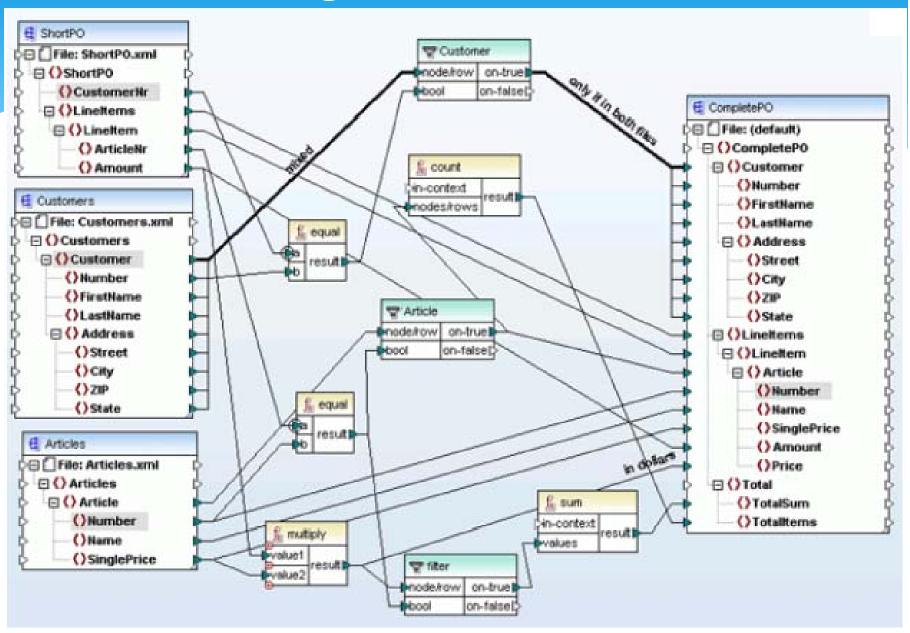
	MLS INFORMATION			
	MLS # System Generated Use Code [®] Single Family Residence Combo - Res & Com Own Your Own Status System Generated (1) Condominium Loft Timeshare Attached Stock Cooperative Loft - Live and Work Apartment Manufactured 433			
	Street Number [®] Direction (1) E N S W Street Name [®]			
	Street Type Unit # City* Area* (Example: Avenue, Street, Alley, Circle)			
) (N) (TA) (E)	County Alameda (ALA)			
	State ^R Zip ^R Zip 4 TGNO ^R			
	vailable at InsideTract.com) Builders Name			
	Y N List Price Low List Price High			
	Service Level* (1) Full Service Model Code* Probate Exclusive Right To Sell or Lease Exclusive Right with Exception Probate Service Level* (1) Full Service Imited Service Model Name Model N			
	One Level Three or More levels Hi-Rise Floor Entry Hi-Rise Total Floors Two Levels			
ller	1 common wall No one above or below Year Built Appraiser Landlord/Tenant/S Source Assessor Other Other No one above No one above Source Estimated Source Source Source Other Plans Source Source Source Source Other Plans Source Sour			
(N) (TA) (TUO) (TUO) (Inty	County* Alameda (AIA)			



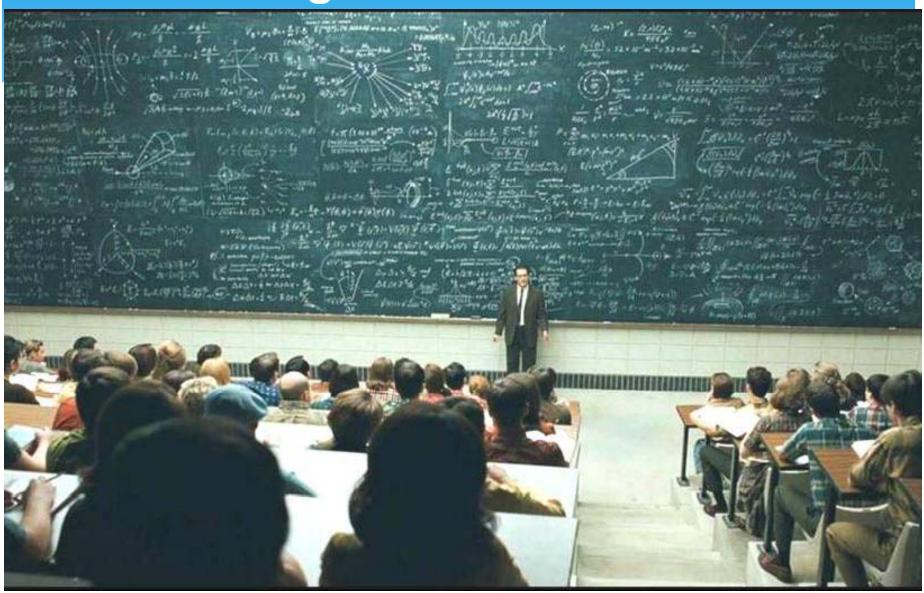
Why REALTORS® Need RETS



Solving What Problems?



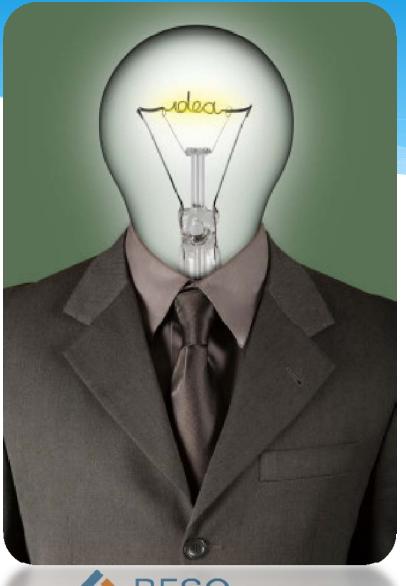
Writing Data Standards



Data Standards Will Launch an App Explosion



Innovators Will Innovate





Realtors & Consumers Will Embrace



New Real Estate Apps



Join RESO and Attend a RETS Conference



Your Speakers Today

Rob Overman noshun software



Travis Wright

Executive Director, RESO





- * Technology direction up to 2012
- * Technology direction 2013
- * R&D Work Group
- * Transport Work Group





History of Technology vs Business

- RETS community was created as a Technology initiative.
 - RETS solved a Technical problem
 - Original Board of Directors was comprised of Business
 Sub Committee and Technology Sub Committee
 - Education and Outreach Work Group





History of Technology vs Business

- * New RESO shift to solving Business Problems
- Board configuration changes
- * Old Sub Committees no longer valid
- * 2012 Proposal for Technology Committee
 - * Committee Chair RESO Director
 - * Comprised of Work Group Chairs and/or Vice-Chairs
 - * Define WG Policies and Procedures
 - Review R&D Work Group Recommendations





2013 Technology Committee

- * Current Focus/Responsibilities
 - * Anticipate Technology Shifts
 - *API
 - * Big Data, Syndication
 - * Foster and Encourage INNOVATION
 - * Cross-Work Group Communication,



2013 Technology Committee

- * Expand Scope of Thinking
 - * Fluid Page Layouts
 - * Web Sockets / Push
 - * Mobile-only Applications





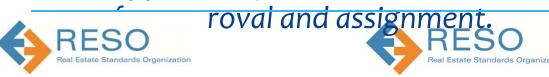
2013 Technology Committee

- * RESO is MORE than just RETS
- * RESO Mission: Provide an environment for the development and implementation of data standards and processes that facilitate innovation, insure portability, eliminate redundancies and obtain maximum efficiencies for all parties



R&D Work Group

- * Created in Feb, 2010
- * Mission: The purpose of the RESO Research & Development Workgroup is to solicit and review submitted **business cases** from the real estate community and identify how RESO can contribute to the benefit of that business process. The submitted cases will be reviewed with representatives from the impacted stakeholder groups to document specific goals and objectives. The resultant business case opportunity will then be submitted to the RESO BOD



R&D Work Group

- * Core Composition: MLS Technology Leaders, Software Developers and Consultants
- * Work Product
 - Business Case Evaluations
 - Stakeholder Support
 - Proposal Review and Benefit Analysis
 - * Application Interoperability Work Group Proposal
 - Recommendations to Board and Work Groups
 - * Whitepaper "Mobile Data Access Recommendations"





R&D Work Group

- * Getting Involved
 - * All are welcome
 - * Google Group "RESO Research & Development"
 - * http://tinyurl.com/263klop
 - * Bi-Weekly Conference Calls
 - * Next Call on Nov 15





- * Chartered 2012
- * Chair Scott Petronis, OnBoard Infomatics
- * Transport is the movement of data from one computer to another.





- * The Problem
 - * RETS 1.x Transport is old and inefficient
 - Steep Learning Curve
 - * Sort of Proprietary
- * The Solution
 - Take Advantage of Current Technology
 - * New RESTful API
 - Shallow Learning Curve





- Excellent Working Session in Sept
- * Replicate vs Real-Time
- * Build a Standardized API Document
- Merge API Efforts from Multiple MLS Vendors
- * Focus on Simplicity and Usability
- * Use OData, XML, JSON and other software industry standards





- * Next Steps
 - * API submissions and review
 - Draft Specification (Q1 Q2)
 - * Security and Authentication





Rob Sits Down

* Thank you!





Have a Great Conference!

Travis Wright
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281-217-2789